EMERGENCY RESPONSE ACTION PLAN

Pasadena Refining System, Inc.

Pasadena Refinery and Red Bluff Tank Farm

Prepared for:

PASADENA REFINING SYSTEM, INC.

111 Red Bluff Road
Pasadena, TX 77506

Prepared by:

Witt O'Brien's
818 Town & Country Blvd., Suite 200
Houston, TX 77024
(281) 320-9796 ● (281) 320-9700 FAX
www.wittobriens.com

9797375

EMERGENCY RESPONSE ACTION PLAN

TABLE OF CONTENTS

Note that figure numbers appearing in this Emergency Response Action Plan correspond to figure numbers in the Integrated Contingency Plan.

FIGURE 1.3
FACILITY INFORMATION

GENERAL INFORMATION	
Facility Name:	Pasadena Refining System, Inc. (PRSI)
Facility Address/Mailing Address:	111 Red Bluff Road Pasadena, Texas 77506
Phone:	**(713) 472-2461 - 24 HR NUMBER**
FAX:	(713) 920-4766 FAX
EPA FRP ID#:	FRP-06-TX-00348
USCG FRP ID#:	93002
PHMSA Sequence #:	0078
Owner Name:	Pasadena Refining System, Inc.
Owner Address/Mailing Address:	111 Red Bluff Road Pasadena, TX 77506
Certification:	The Company grants full authority to the designated Qualified and Alternate Qualified Individuals to implement the Integrated Contingency Plan and to: ● Activate and engage in contracting with oil spill removal organizations, ● Act as liaison with the pre-designated Federal On-Scene Coordinator (FOSC), and ● Obligate funds required to carry out response activities.
****Qualified Individual and Emergency Coordinator:*** ***Home Address:*** ***Training Comments:***	Ron Sommers (713) 920-3946 *(Office)* (713) 319-5706 *(Cellular)* Address is available through HR for privacy reasons. Clean Channel Cooperative QI Training.
****Alternate Qual. Individual/ Alt. Emergency Coordinator:*** ***Home Address:*** ***Training Comments:***	Doug Henson (713) 920-5744 (*Office*) (281) 216-1427 *(Cellular)* Address is available through HR for privacy reasons. Clean Channel Cooperative QI Training.
****Alternate Qual. Individual/ Alt. Emergency Coordinator:*** ***Home Address:*** ***Training Comments:***	Alisa White (713) 920-4176 (*Office*) (713) 539-6536 *(Cellular)* Address is available through HR for privacy reasons. Clean Channel Cooperative QI Training.
***** A Qualified Individual (QI) or Alternate Qualified Individual (AQI) is available 24 hours per day.	

FIGURE 1.3

FACILITY INFORMATION (Cont'd)

GENERAL INFORMATION (Cont'd)	
***Alternate Qual. Individual/ Alt. Emergency Coordinator**	Les Cumby (713) 920-5662 (*Office*) (281) 216-0848 *(Cellular)*
Home Address:	Address is available through HR for privacy reasons.
Training Comments:	Clean Channel Cooperative QI Training.
***Alternate Qual. Individual/ Alt. Emergency Coordinator**	Riley Davis (713) 920-4114 (*Office*) (281) 216-1621 *(Cellular)*
Home Address:	Address is available through HR for privacy reasons.
Training Comments:	Clean Channel Cooperative QI Training.

***** A Qualified Individual (QI) or Alternate Qualified Individual (AQI) is available 24 hours per day.

FIGURE 1.3

FACILITY INFORMATION (Cont'd)

FACILITY LOCATION	
Telephone/FAX:	Additional telephone references, including 24 hour numbers, for the Facility, Owner, and QI/AQI are provided in Figure 2.2.
Primary SIC Code:	2911
NAICS Code:	32411
County:	Harris County
Latitude:	29° 43' 27" N
Longitude:	95 ° 12' 22" W
Area Map:	Provided in Figure 1.1
Facility Diagram:	Provided in Figure 1.2
Wellhead Protection Area:	PRSI is not located in a Texas Wellhead Protection Area [reference: Shawn Ables with TCEQ at 512-239-1758].
Date of Initial Oil Storage:	Approximately 1920

Landside Directions:

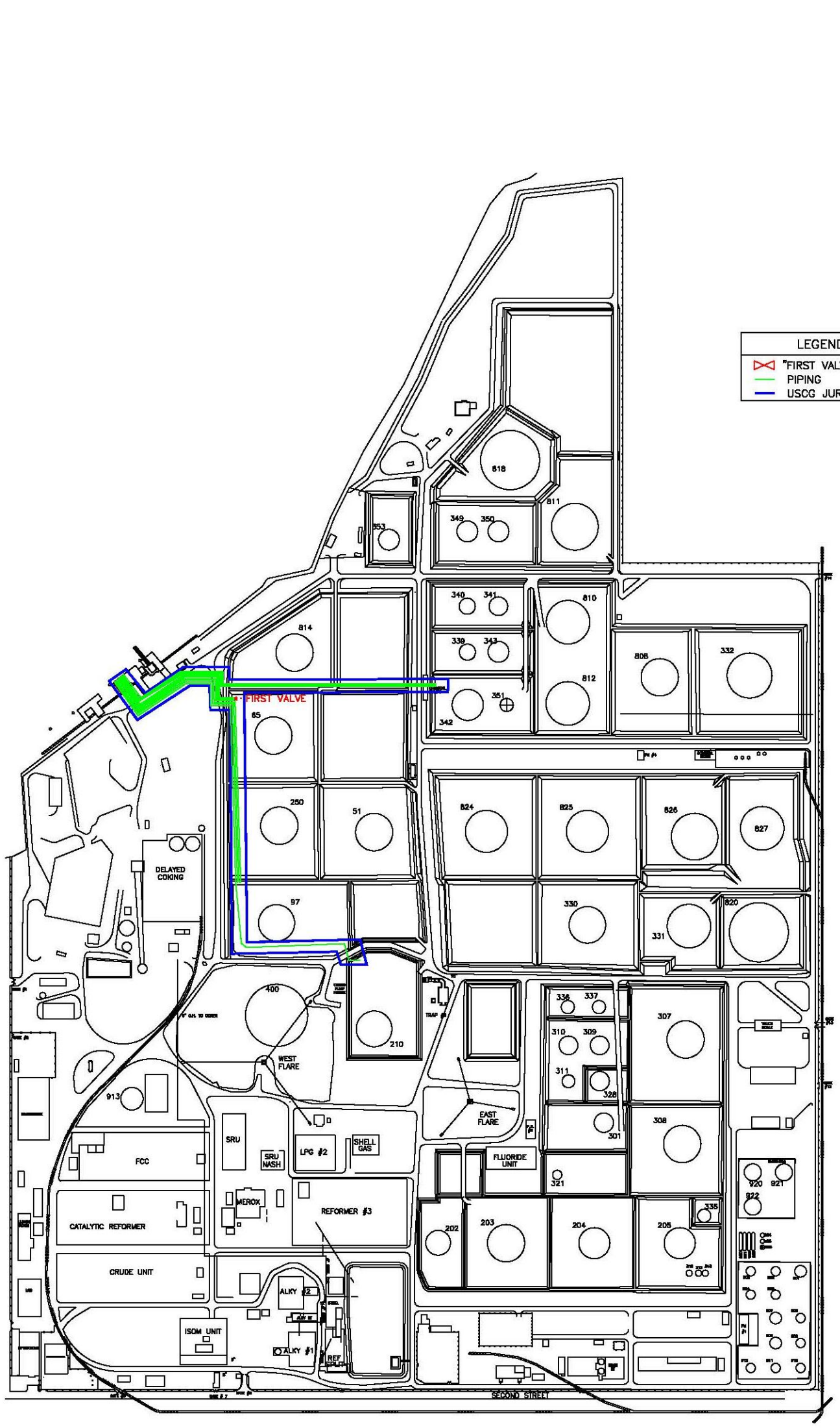
- From I-610, exit east HWY 225 (Pasadena) and travel approximately 4.4 miles to Red Bluff Road.
- Turn northwest (left) and travel approximately 1.0 miles to PRSI's Pasadena Refinery.
- Turn north (right) into PRSI's – Pasadena Refinery Administration Building Parking Lot.
- The physical address is 111 Red Bluff Road, Pasadena, Texas.

Waterside Directions:

- Travel Houston Ship Channel (west), facility is on the south bank, between buoys 161 and 163.

FIGURE 1.2

FACILITY DIAGRAM



0' 200' 400' 800'

SCALE

Facility Diagram

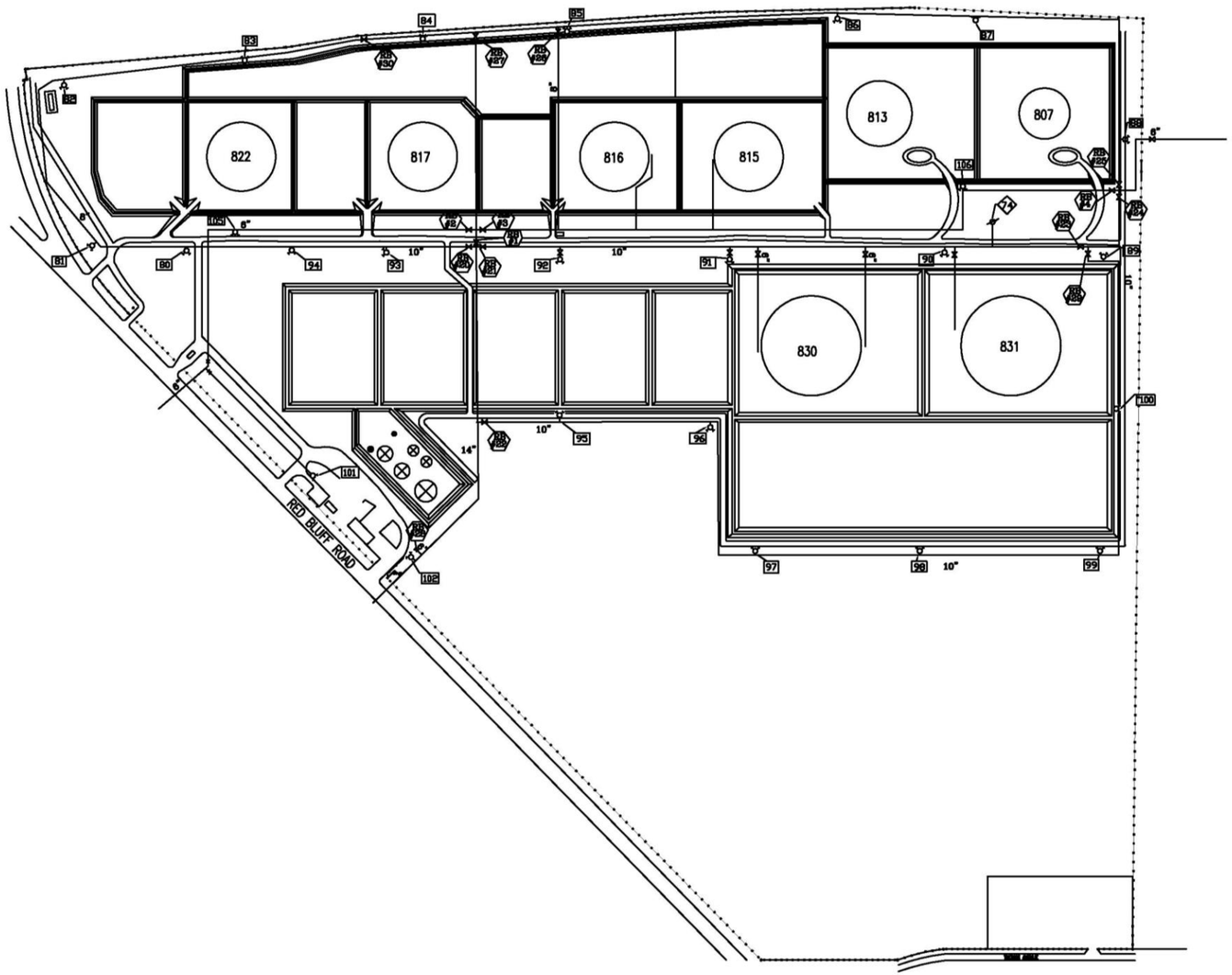
Pasadena Refining System, Inc
Pasadena, TX

DATE:	JOB No:	SCALE:	EDITED BY:
2/24/15	–	AS NOTED	MJDS

WITT | O'BRIEN'S
818 Town & Country, Ste 200
Houston, Texas 77024
Phone (281)320-9796
Fax (281) 320-9700

FIGURE 1.2(a)

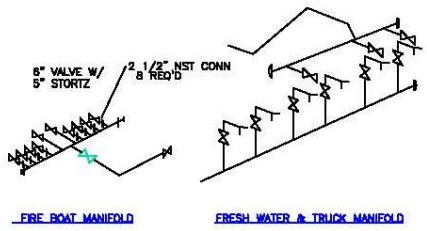
FACILITY DIAGRAM



PASADENA REFINING SYSTEM, INC. RED BLUFF TANK FARM PASADENA, TEXAS	JOB NO: 59083	DATE: 04–08–14	FACILITY DIAGRAM	WITT|O'BRIEN'S
	DRAWN: EDH	SCALE: N/S		818 Town & Country Blvd., Suite 200 Houston, Texas 77024 Phone: (281) 320-9796

FIGURE 1.2(b)

FACILITY DIAGRAM



FIRE BOAT MANIFOLD

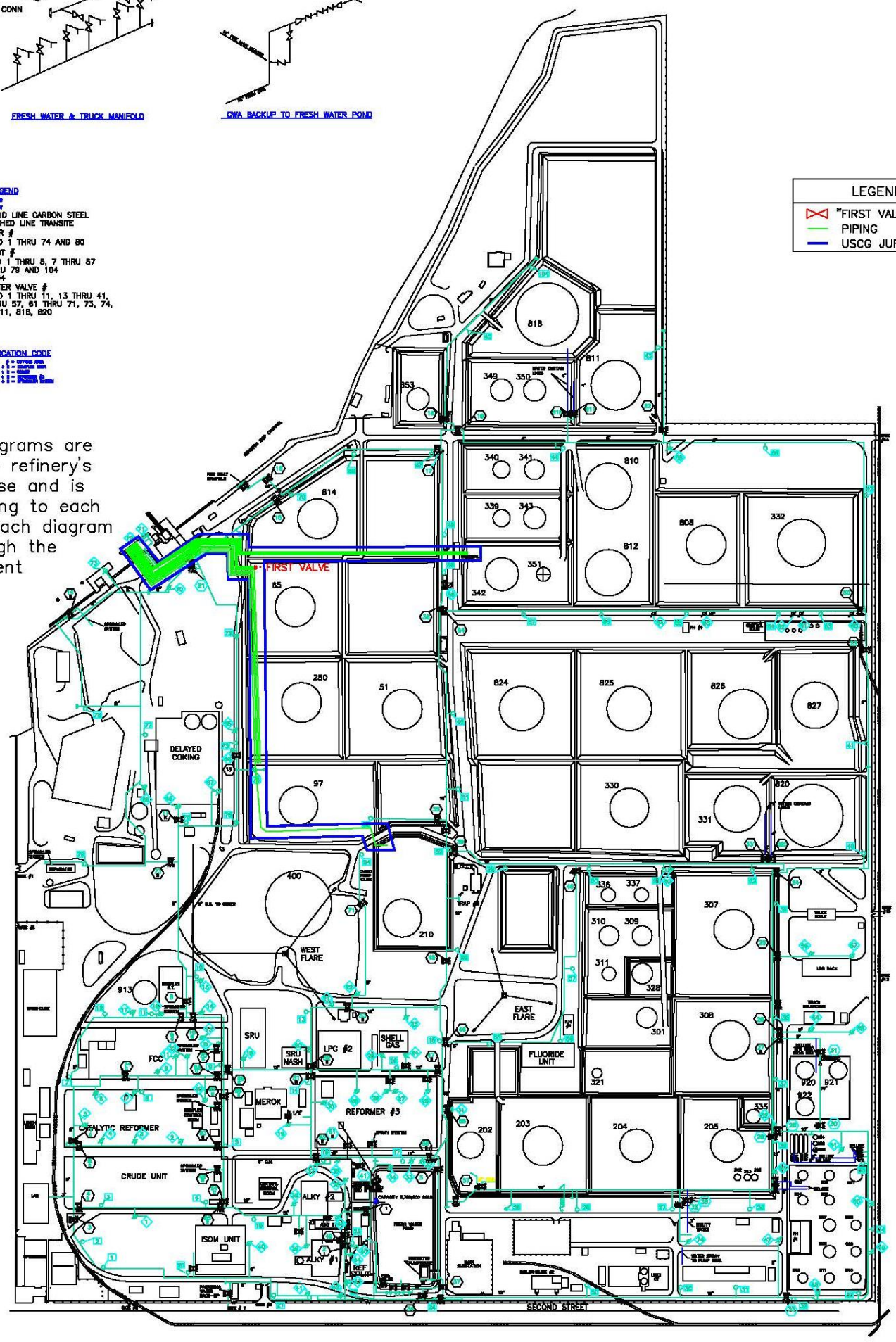
FRESH WATER & TRUCK MANIFOLD

CWA BACKUP TO FRESH WATER POND

LEGEND
SOLID LINE CARBON STEEL
DASHED LINE TRANSITE
MONITOR #
USED 1 THRU 74 AND 80
HYDRANT #
USED 1 THRU 5, 7 THRU 57
59 THRU 79 AND 104
AND 104
FIREWATER VALVE #
USED 1 THRU 11, 13 THRU 41,
45 THRU 57, 61 THRU 71, 73, 74,
331, 811, 818, 820

LOCATION CODE

NOTE:
Facility piping diagrams are maintained in the refinery's drawings data base and is organized according to each unit. Access to each diagram is available through the Drafting Department File Room.



LEGEND
"FIRST VALVE"
PIPING
USCG JURISDICATION

0' 200' 400' 800'
SCALE

USCG Diagram

Pasadena Refining System, Inc
Pasadena, TX

DATE:	JOB No:	SCALE:	EDITED BY:
2/24/15	–	AS NOTED	MJDS

WITT | O'BRIEN'S
818 Town & Country, Ste 200
Houston, Texas 77024
Phone (281)320-9796
Fax (281) 320-9700

FIGURE 1.2(c)

PASADENA REFINERY
AREIAL PHOTO

WITT | O'BRIEN'S

Map Prepared by; Witt O'Brien's
818 Town & Country Blvd., Houston, Texas 77024
281-320-9796

Pasadena Refining - Aerial Photo
111 Red Bluff Road
Pasadena, Texas 77506

0 500 1,000 1,500 2,000
Feet
95°13'0"W
95°12'30"W
95°12'0"W
95°11'30"W
95°11'0"W
29°44'0"N
29°43'30"N
29°43'0"N
29°42'30"N
29°42'0"N
Hunting Bayou
Buffalo Bayou
Federal Rd
Clinton Dr
1st St
A Ave Jefferson
Jackson Rd
Davison St
Jefferson St
N Witter St
N Shaver St
Crown Rd
E Red Bluff Rd
Red Bluff Rd
N Pasadena Blvd
W Richey St
Pasadena Fwy
225
Shaw Ave
Eagle Ave
E Broadway Ave
Broadway
Lincoln Place
Vincewood Terrace
McMaster & Pomeroy
WN-Blakesley
Guinn
Old Downtown
First Harvest
Walter Williams Courts
Westfall
Burr
Pasadena Town Square
Jenkins Rd
Lawrence Ave
Map Key
Schools
TCEQ Public Water Supply Well
Pipelines
36" Furnace Oil Line
40" Gasoline Line
Drinking Water Source (PHMSA)
Highly Populated Areas
Image courtesy of USGS
Geographics SIO © 2014
Humble
Aldine
Crosby
Sheldon
Barrett
Cloverleaf
Channelview
Houston
Deer Park
Bellaire
Pasadena
La Porte
National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA,
Overview

FIGURE 1.2(d)

RED BLUFF TANK FARM
AREIAL PHOTO

WITT | O'BRIEN'S

Map Prepared by; Witt O'Brien's
818 Town & Country Blvd., Houston, Tx. 77024
281-320-9796

0 100 200 300 400 500 Feet

Red Bluff Tank Farm - Aerial Photo
111 Red Bluff Road
Pasadena, Texas 77506

95°11'50"W 95°11'40"W 95°11'30"W 95°11'20"W

29°42'50"N 29°42'40"N 29°42'30"N 29°42'20"N 29°42'10"N

Overview

FIGURE 2.1

INTERNAL NOTIFICATION SEQUENCE

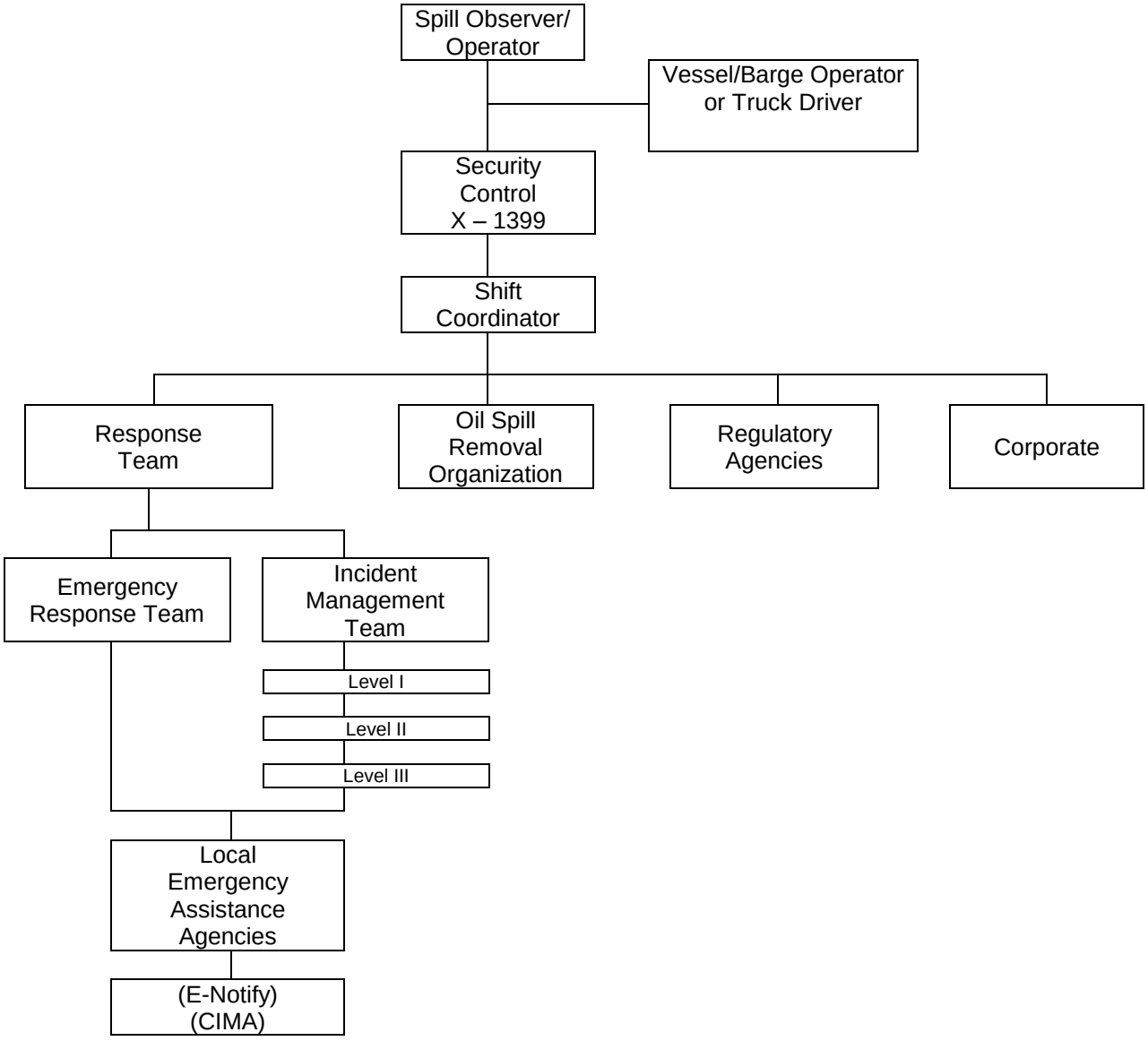


FIGURE 2.2

INTERNAL NOTIFICATION REFERENCES

GENERAL FACILITY			
FACILITY	**ADDRESS**	**OFFICE**	**FAX NUMBER**
Pasadena Refinery	111 Red Bluff Road Pasadena, TX 77506	(713) 472-2461 **24 Hr. Number**	(713) 920-4766

QUALIFIED INDIVIDUALS					
POSITION/TITLE	**NAME**	**RESPONSE TIME**	**TRAINING LEVEL**	**OFFICE**	**MOBILE**
Qualified Individual/Emergency Coordinator	Ron Sommers	60 minutes (maximum)	Training records are available at the Facility training department.	(713) 920-3946	(713) 319-5706
Alternate Qualified Individual/Alt. Emergency Coordinator	Doug Henson	60 minutes (maximum)		(713) 920-5744	(281) 216-1427
Alternate Qualified Individual/Alt. Emergency Coordinator	Les Cumby	60 minutes (maximum)		(713) 920-5662	(281) 216-0848
Alternate Qualified Individual/Alt. Emergency Coordinator	Riley Davis	60 minutes (maximum)		(713) 920-4114	(281) 216-1621
Alternate Qualified Individual/Alt. Emergency Coordinator	Alisa White	60 minutes (maximum)		(713) 920-4176	(713) 539-6536

FIGURE 2.2 (Cont'd)

INTERNAL NOTIFICATION REFERENCES

INCIDENT MANAGEMENT TEAM				
POSITION/TITLE	**PRIMARY**	**RESPONSE TIME***	**OFFICE**	**MOBILE**
Volunteer Emergency Response Team	Activated through Security Control at Extension 1399 via Global Pager System		(713) 476-2461	Various (On File)
Incident Commander	Mark Berlinger	2 Hours (maximum)	(713) 920-3924	(281) 832-0740
Operations Section Chief	John Edmunds	2 Hours (maximum)	(713) 920-3913	(713) 539-6538
Public Information Officer	Clarisa Rodriguez	2 Hours (maximum)	(713) 920-4751	(832) 616-9229
Liaison Officer	Joel Camann	2 Hours (maximum)	(713) 920-4764	(832) 483-6936
Safety Officer	Elliott Johnson	2 Hours (maximum)	(713) 920-5106	(832) 296-4174
Planning Section Chief	Josh Kolett	2 Hours (maximum)	(713) 920- 4710	(832) 616-9236
Procurement Unit Leader	Elisio Soares	2 Hours (maximum)	(713) 660-4503	(281) 684-6099
Logistics Section Chief	Bill Domescik	2 Hours (maximum)	(713) 920-3961	(713) 539-6957

When the identified person is not available the role will be filled by a designated deputy.

* Response Time - refers to availability to direct response activities

FIGURE 2.3

NOTIFICATION DATA SHEET

Date of Incident: _____ ***Time of Incident:*** _____

Reporter's Full Name: _____ ***Position:*** _____
Day Phone Number: _____ ***Evening Phone Number:*** _____
Company: Pasadena Refining System, Inc. ***Organization Type:*** _____

Facility Address: _____
111 Red Bluff Road
Pasadena, TX 77506

Owner's Address: Pasadena Refining System, Inc.
111 Red Bluff Road
Pasadena, TX 77506

Facility Latitude: 29° 43' 27" N ***Facility Longitude:*** 95° 12' 22" W
Incident Address/Location: _____
(if not at Facility): _____
On-Scene Weather Conditions: _____
Responsible Party's Name: _____ ***Phone Number:*** _____
Responsible Party's Address: _____
Source and/or cause of incident: _____

Nearest City: Pasadena
County Harris ***State:*** Texas ***Zip code:*** 77506
Section: _____ ***Township:*** _____ ***Range:*** _____ ***Borough:*** _____
Distance from City: _____ ***Unit of Measure:*** _____ ***Direction from City:*** _____
Container Type: _____ ***Container Storage Capacity:*** _____ ***Unit of Measure:*** _____
Facility Oil Storage Capacity: 239,914,931 ***Unit of Measure:*** Gallons
Were Materials Discharged? _____ ***(Y/N) Confidential?*** _____ ***(Y/N)***

CHRIS Code	Total Quantity Released	Unit of Measure	Water Impact (*YES or NO*)	Quantity into Water	Unit of Measure

RESPONSE ACTION(S)

Action(s) taken to Correct, Control, or Mitigate Incident: _____

Number of Injuries: _____ ***Number of Deaths:*** _____
Evacuation(s): _____ ***(Y/N) Number Evacuated:*** _____
Was there any damage? _____ ***(Y/N) Medium Affected:*** _____
Description: _____
More Information about Medium: _____

National Response Center (NRC): 1-800-424-8802
Additional Notifications (Circle all applicable): ***USCG*** ***EPA*** ***State*** ***Other***
Describe: _____
NRC Incident Assigned No: _____

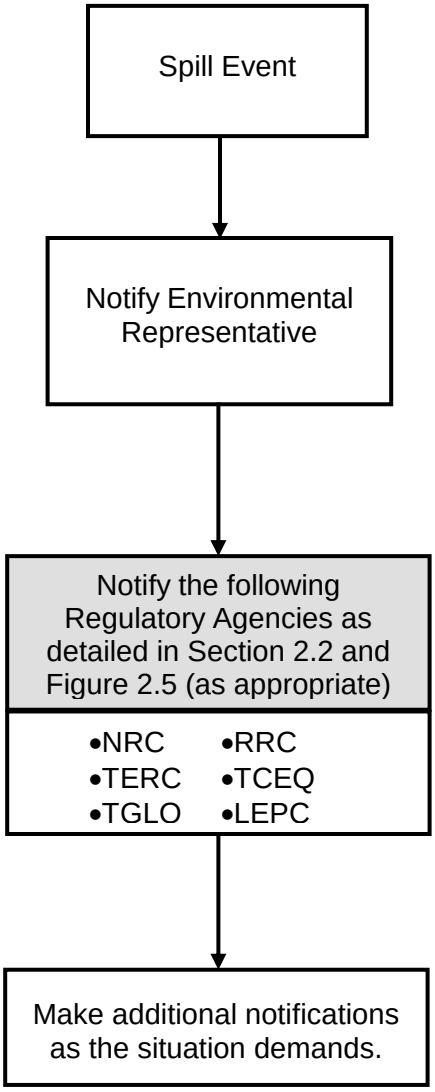
Any information about the incident not recorded elsewhere in this report: _____

Meeting Federal Obligations to Report? _____ ***(Y/N) Date Called:*** _____
Calling for Responsible Party? _____ ***(Y/N) Time Called:*** _____

NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.

Note: Within 15 days after an incident involving a RCRA hazardous waste, a written report on the incident must be submitted to the Regional Administrator.

FIGURE 2.4
NOTIFICATION FLOWCHART



Acronyms

- NRC = National Response Center
- TERC = Texas Emergency Response Center
- TGLO = Texas General Land Office
- RRC = Railroad Commission
- TCEQ = Texas Commission on Environmental Quality
- LEPC = Local Emergency Planning Committee

FIGURE 2.5

EXTERNAL NOTIFICATION REFERENCES

REQUIRED EXTERNAL NOTIFICATIONS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
National Response Center (NRC) USCG/EPA	Washington, DC	(800) 424-8802	(202) 267-2675
State Emergency Response Commission (SERC)* TCEQ/GLO/RRC	Austin, TX	(800) 832-8224	
USCG Sector Houston-Galveston	Houston, TX	(281) 464-4854	(281) 464-4800
USCG Vessel Traffic	Houston, TX	(281) 464-4837	
US Environmental Protection Agency Region VI	Dallas, TX	(800) 887-6063 (214) 665-2200	(866) 372-7745
DOT Office of Pipeline Safety – HAZ MAT 24 Hour Crisis Management Center	Houston, TX	(713) 272-2859 (202) 366-1863	EMERG. (800) 424-8802
Southeast Regional LEPC	Pasadena, TX	(713) 475-5599 (OEP) (713) 477-1511 (Dispatch for Duty Officer – 24 Hrs.)	(713) 475-5588
CAER Line		(281) 476-2237	

RECOMMENDED EXTERNAL NOTIFICATIONS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
OSHA (For Reportable Injury or Death)	Washington, DC	(800) 321-6742 (24 Hrs.)	(281) 591-2438
Texas General Land Office (TGLO)	Austin, TX	(800) 832-8224 (24 Hrs.)	(281) 470-6597 (La Porte, TX)
Texas Railroad Commission (Pipeline Safety Division)	Houston, TX	(713) 869-8425 (Day)	(512) 463-6788 (24 Hrs.)
Texas Commission on Environmental Quality (TCEQ)	Houston, TX	(800) 832-8224	(713) 767-3563
Texas Railroad Commission (Oil and Gas Division)	Houston, TX	(713) 869-5001 (24 Hrs.)	(512) 463-6788 (24 Hrs.)

* Hotline answered by the Texas Department of Public Safety which will in turn notify TGLO, TCEQ and TRRC as applicable. Follow-up calls to all appropriate agencies are always advisable.

FIGURE 2.5 (Cont'd)

EXTERNAL NOTIFICATION REFERENCES

ASSISTANCE/ADVISORY NOTIFICATIONS (outside resources)			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
U.S. Fish and Wildlife Service (USFWS)	Clear Lake, TX	(281) 286-8282 (24 Hrs.)	
NOAA Weather Service	Corpus Christi, TX	(361) 289-0959	
USACOE (EOPS Chief Gus Marinas)	Galveston, TX	(409) 766-3956	Duty Office (409) 766-3899
Universal Weather	Houston, TX	(713) 944-1622	
National Weather Service (Recorded Forecast)	Dickinson, TX	(281) 337-5074	
Texas Parks and Wildlife Department	Austin, TX	(512) 389-4848	(281) 534-0130
Texas Department of Public Safety	Austin, TX	(512) 424-2208	
Port of Houston Authority Police Dept.	Houston, TX	(713) 670-3620	(713) 670-2892 (Fax)
City of Pasadena	Pasadena, TX	(713) 477-1511	(713) 475-5555 (Metro Action Line)
City of Pasadena Police Department	Pasadena, TX	911	(713) 477-1221 (24 Hrs.)*
City of Pasadena Fire Department	Pasadena, TX	911	(713) 475-5554 / (713) 475-1221 (24 Hrs.)*
Bay Star Ambulance	Baytown, TX	(877) 777-7400 (Dispatch)	(281) 427-1554
City of Pasadena Water Department	Pasadena, TX	(713) 475-5566	
City of Pasadena Fire Marshal's Office	Pasadena, TX	(713) 475-5556	
City of Pasadena City Marshal's Office	Pasadena, TX	(713) 475-7282	
CenterPoint	Houston, TX	(713) 207-2222 (Outage Reports)	(713) 207-1111 (281) 894-1625 (24 Hrs.)
AT&T	Houston, TX	(800) 286-8313	(713) 802-9950
Texas One Call System (Excavation)	Houston, TX 811	(800) 545-6005	On Line E Ticket
Lone Star Notification Center (Excavation)	Houston, TX	811 / (800) 669-8344	(713) 432-0365
Texas Excavation Safety System (Excavation)	Dallas, TX	(972) 231-5497	(713) 223-4567
KTRH (740 AM Radio)	Houston, TX	(713) 212-8000	(713) 212-8740 (News Room) (24 Hrs.)
Coastal Water Authority	Pasadena, TX	(713) 472-8225	
Harris County Public Health and Environmental Services	Pasadena, TX Houston, TX	(713) 274-6300 (24 Hrs.) (713) 920-2831	(713) 274-6475 Fax (Upset Conditions)

* Designated primary emergency authority.

FIGURE 2.5 (Cont'd)

EXTERNAL NOTIFICATION REFERENCES

NEIGHBORS			
AGENCY	**LOCATION**	**OFFICE**	**ALTERNATE**
Chevron/Texaco	Galena Park, TX	(713) 453-3581	
Harris County Washburn Tunnel	Galena Park, TX	(713) 455-0062	
Coastal Water Authority	Pasadena, TX	(713) 472-8225	
Kinder Morgan	Pasadena, TX	(713) 920-8450	(713) 473-9271
Kinder Morgan	Galena Park, TX	(713) 450-7422	(713) 450-0400
Gulf Coast Waste Disposal	Pasadena, TX	(713) 472-5507	
Steel and Pipe Supply	Pasadena, TX	(713) 472-5614	
Southwest Ship Yard	Pasadena, TX	(281) 860-3200	(281) 860-3215 (Fax)
Port Terminal Railway	Pasadena, TX	(713) 393-6500	(713) 393-6509 (24 Hrs.)
Wiggins Metals	Pasadena, TX	(713) 472-2057	

LOCAL EMERGENCY SERVICES			
DIAL 911 ***for All Police, Fire, and Ambulance Emergencies***			
SERVICE	**LOCATION**	**OFFICE**	**ALTERNATE**
Deer Park Fire Department	Deer Park, TX	(281) 478-7281	(281) 479-1511
Deer Park Police Department	Deer Park, TX	(281) 478-2000	(281) 479-1511
Office of Emergency Management	Deer Park, TX	(281) 478-7298	(281) 478-7289 (Fax)
Galena Park Fire Department	Galena Park, TX	(713) 674-5311	
Galena Park Police Department	Galena Park, TX	(713) 675-3471	(713) 675-3472
Pasadena Police Department	Pasadena, TX	(713) 477-1221 (24 Hrs.)	
Pasadena Fire Department	Pasadena, TX	(713) 475-5554	(713) 475-1221 (24 Hrs.)
Harris County Sheriff	Houston, TX	(713) 221-6000	
Department of Public Safety	Austin, TX	(512) 424-2000	
F.B.I. – Houston	Houston, TX	(713) 693-5000	(713) 936-8900 (Fax)
Pasadena Fire Marshal	Pasadena, TX	(713) 475-5556	

FIGURE 2.5 (Cont'd)

EXTERNAL NOTIFICATION REFERENCES

LOCAL EMERGENCY SERVICES			
DIAL 911 ***for All Police, Fire, and Ambulance Emergencies***			
SERVICE	**LOCATION**	**OFFICE**	**ALTERNATE**
Life Flight (Hermann Life Flight LD)	Houston, TX	(713) 704-4357	(713) 704-3590 Non-emergency
Ambulance			911
Memorial Hermann Southeast Hospital	Houston, TX	(281) 929-6100	
Bayshore Medical Center	Pasadena, TX	(713) 359-2000	
Memorial Hermann Hospital	Houston, TX	(713) 704-4000	

USCG CLASSIFIED OIL SPILL REMOVAL ORGANIZATIONS (OSRO)			
COMPANY	**LOCATION**	**OFFICE**	**ALTERNATE**
OMI Environmental Solutions	Pasadena, TX	(800) 645-6671 (24 Hrs.)	
Horizon Environmental	LaPorte, TX	(281) 479-5300 (24 Hrs.)	(866) 609-6208 (24 Hrs.)
Clean Channel Association (CCA)	Pasadena, TX	(713) 534-6195 (24 Hrs.)	(713) 534-6197 (Fax)

ADDITIONAL RESPONSE RESOURCES			
COMPANY	**LOCATION**	**OFFICE**	**ALTERNATE**
CIMA	Deer Park, TX	(281) 476-5040	(281) 837-9191 (Dispatch) (713) 473-9191
Witt O'Brien's LLC	Houston, TX	(281) 320-9796	(985) 781-0804 (24 Hrs.)
Wildlife Center of TX	Houston, TX	(713) 861-9453 (8-5)	(713) 279-1417
Wildlife Response SVC LLC	Seabrook, TX	(713) 705-5897	(281) 266-0054 PGR
Consolidated Crane & Rigging (Cranes)	Houston, TX	(713) 641-3330 (24 Hrs.)	(888) 752-7263
Rapid Environmental Services (Waste)	La Porte, TX	(281) 479-4376	
Williams Fire & Hazard Control (FF)	Spring, TX	(281) 999-0276 (24 Hrs.)	(409) 727-2347 (Vidor, TX) (24 Hrs.)
Wild Well Control, Inc.	Houston, TX	(281) 784-4700	(281) 784-4750 (Fax)
American Commercial Barge Lines	Channelview, TX	(800) 457-6377	
Kirby Inland Marine (Barge)	Channelview, TX	(713) 435-1600	(713) 435-1859 (24 Hrs.)
T & T Marine Salvage Inc, (Salvage) (FF)	Galveston, TX	(281) 488-5757	(409) 744-1222 (24 Hrs.)
Garner Environmental Services, Inc.	Deer Park, TX	(800) 424-1716 (24 Hrs.)	(281) 930-1200

DISCHARGE PLANNING VOLUMES

Discharge Scenario	Worst Case Potential Oil Group	Planning Volumes			
		EPA (Bbls)	USCG (Bbls)	DOT (Bbls)	Facility Maximum (Bbls)
Small/Average Most Probable	Group 4	50	50	N/A	50
Medium/Maximum Most Probable	Group 4	857	616	N/A	857
Worst Case	Group 4	523,970	6,164	40,516	523,970

AMPD INFORMATION

AMPD Response Coverage Information for

Pasadena Refining System, Inc.
(Company name)

1. **AMPD response provider** (check one): ☒ Plan Holder ☐ OSRO

   If OSRO, company name(s): Expiration date (Contract/other approved means)

2. **Equipment deployment personnel** are (check one):

   ☒ Located at equipment site ☐ On recall

3. **Physical location** (street address) of AMPD equipment (boom/skimmer/temporary storage) and qualified deployment personnel.

   Equipment Address (*-1hour response time):

   Boom: Warehouse at West Plant

   Equipment Address (*-2hour response time)

   Skimmer:

   Warehouse at West Plant

   Temporary Storage:

   At site

   - *Planning Assumptions: On-water speed, 5 knots; land speed, 35 miles per hour; notification/mobilization – 30 minutes*

3.1 INITIAL RESPONSE ACTIONS

FIRST PRSI PERSON NOTIFIED/ON SCENE

- _____ Follow the appropriate ***"Specific Incident Response Checklist"*** in Figure 3.1 and ***"Product Specific Response Considerations"*** in Figure 3.2.
- _____ Notify **Refinery Management and QI/AQI** of the incident.
- _____ Utilize in-house and local emergency services as necessary (police, fire, medical).

REFINERY MANAGEMENT

- _____ **Evaluate the Severity**, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- _____ Assume the role of **Incident Commander**.
- _____ **Confirm safety** aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- _____ Activate the **Incident Management Team, Volunteer Emergency Response Team, Channel Industries Mutual Aid, and primary response contractors**, as the situation demands.
- _____ Coordinate/perform **activation of additional spill response contractors,** as the situation demands (telephone reference is provided in Figure 2.5).
- _____ Notify the **Manager of Oil Movements** for all vessel and tank incidents.
- _____ Notify **Refinery Manager**. Provide incident briefing and coordinate activation of the Incident Management Team, as the situation demands.
- _____ Coordinate/perform **regulatory agency notification,** as the situation demands, (notification procedures and telephone references are provided in Figures 2.4 and 2.5 respectively).
- _____ Proceed to spill site and **coordinate response and clean-up operations.**
- _____ Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations provided in Figure 3.2.

INCIDENT MANAGEMENT TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Facility, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Phases Of The Spilled Product Should Be Avoided.

Prior to arrival of the Qualified Individual or Alternate Qualified Individual, Facility personnel shall initiate response activities and supervise response resources in accordance with the following guidelines, as applicable and appropriate.

INITIAL RESPONSE

- _____ Approach from upwind side and advise all personnel in the area.
- _____ Take appropriate personal protective measures.
- _____ Report incident by using emergency radio #1 or dial 1399 and report incident to the Security Control. Provide the following information:
  - Name
  - Location
  - Nature of incident
  - Injuries
  - Source or material
  - If known resources needed
- _____ If safe to do so, restrict access to the spill site and adjacent area as the situation demands. Be aware and eliminate any ignition sources in the area. Take any other steps necessary to minimize any threat to human health and environment.
- _____ Verify type of product and quantity released and request an SDS.
- _____ If safe to do so, identify/isolate the source to minimize spill/loss of product.
- _____ Use testing and sampling equipment to determine potential safety hazards.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

LINE PIPING, BREAK, LEAK OR RUPTURE

- _____ Shut down pumping equipment.
- _____ Close upstream and downstream block valves. If safe and appropriate, use pumps on the line or vacuum trucks to remove product if applicable.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colorimetric indicator and other air sampling (*i.e.* Benzene and H_2S) measurements to assure that areas are safe to enter for continued response operations. All hazards of each specific material encountered should be considered.
- _____ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
  - Earthen dike/berm
  - Ditching
  - Spreading sorbent material over the spill
- _____ Prevent the spill from entering areas such as waterways, sewers, etc. to the greatest extent possible.
- _____ Determine the direction and expected duration of spill movement. Refer to the maps in Section 6.0.
- _____ If located within containment area, insure that drainage valve(s) is "closed".
- _____ Drain the line section, as the situation demands.
- _____ Request Internal Security or local authorities to establish traffic control in the area, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line/rack to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems and dispose of all wastes according to Regulatory Requirements. Be alert for underground cables.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection, diversion, and recovery actions.
- _____ Inform local operators such as utilities, telephone company, railway as necessary.
- _____ Complete follow-up and written reporting, as the situation demands.
- _____ If necessary, call one (1) of the approved remediation companies to remove the remaining contaminated soils and residue from the containment area. Contact PRSI Environmental Department to assist in coordinating the waste removal methods and to remove waste from the Facility for disposal.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

LINES UNDER PRESSURE

- _____ Shut down pumping equipment.
- _____ Close upstream and downstream block valves. If safe and appropriate, use pumps on the line or vacuum trucks to remove product.
- _____ Pressured lines may be vented to the flares to avoid a spill's increase/impact. Not all lines have flare connections.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colorimetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
  - Earthen dike/berm
  - Ditching
  - Spreading sorbent material over the spill
- _____ Prevent the spill from entering areas such as waterways, sewers, etc. to the greatest extent possible.
- _____ Determine the direction and expected duration of spill movement. Refer to the maps in Section 6.0.
- _____ If located within containment area, insure that drainage valve(s) is "closed".
- _____ Drain the line section, as the situation demands.
- _____ Request Internal Security or local authorities to establish traffic control in the area, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line/rack to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection, diversion, and recovery actions.
- _____ Inform local operators such as utilities, telephone company, railway as necessary.
- _____ Complete follow-up and written reporting, as the situation demands.
- _____ If necessary, call one (1) of the approved remediation companies to remove the remaining contaminated soils and residue from the containment area. Contact PRSI Environmental Department to assist in coordinating the waste removal methods and to remove waste from the Facility for disposal.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

STORAGE TANK LEAKS AND OVERFLOWS

- _____ Shut down all tank battery product movement operations and isolate the tank.
- _____ Ensure that the containment area drainage valve(s) is “closed”.
- _____ If near tank bottom, fill tank with water and maintain water bottom to suspend the discharge.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colorimetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ Block drainage of spilled material from traveling offsite.
- _____ Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- _____ Remove product from containment (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck w/ skimmer attachments.
- _____ Process recovered product through the recovered oil system and the residual through the wastewater treatment system.
- _____ Determine the direction and expected duration of spill movement. Refer to the maps in Section 6.0.
- _____ Empty tank as soon as possible.
- _____ Transfer contents to alleviate overflow as applicable.
- _____ Make all necessary repairs. Return the line/tank to service when repairs are complete and tested.
- _____ Clean up product spill to eliminate any possible environmental problems. Be alert for underground cables.
- _____ If necessary, call one (1) of the approved remediation companies to remove the remaining contaminated soils and residue from the containment area. Contact PRSI Environmental Department to assist in coordinating the waste removal methods and to remove waste from the Facility for disposal.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 and ACP. Determine which of these may be threatened by the spill and direct the response to these locations. Initiate protection and recovery actions.
- _____ Inform local operators such as utilities, telephone company, railway as necessary.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

LEAK OR SPILL DURING TRUCK LOADING/UNLOADING OPERATIONS

- _____ Take no risks with personal safety.
- _____ Try to stop flow of product but only if it can be done safely.
- _____ Evacuate personnel from the area, as the situation demands.
- _____ Discontinue all loading operations and stop all traffic from entering the area.
- _____ Do not move any truck from area until area is secured and until authorized by representatives from the Safety and Environmental Departments.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colorimetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations. If level of vapors are high, do not attempt to enter area until Volunteer Emergency Response Team is on site and takes appropriate action.
- _____ If safe to do so, collect residual product with explosion proof pump or vacuum truck.
- _____ Absorb spill with absorbent pads. If necessary dam area with absorbent booms. Place spill stoppers over any catch basins to keep product from entering any waterway or storm sewers.
- _____ Fire Danger. Care should be taken in working with a spill that a serious fire hazard is not created by recovery attempts. In many cases, small amounts of gasoline might best be treated by containment and evaporation to minimize the risk of fire. It is of utmost importance that unauthorized persons and equipment be kept out of the area when a spill has occurred involving a flammable liquid.
- _____ Area Declared Safe. Do not start any trucks until all product is flushed and vapors or fumes have cleared the area and the Shift Supervisor declares the emergency over and safe to resume operations.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

MARINE OPERATION SPILLS/LEAKS

- _____ Use all appropriate emergency shutdown systems.
- _____ Shut down all engines/motors.
- _____ Block all line and ship manifold discharge valves.
- _____ If hose rupture, drain line into barge, drums, buckets, and block line to stop spill into water.
- _____ Notify Security Control at extension 1399.
- _____ Notify Oil Movements Supervisor.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colorimetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ If other than hose rupture, determine source of leak and stop if safe to do so.
- _____ Prevent discharge from entering the water if at all possible by:
  - Pumping from sump or deck drainage system into drums, tanks, containment area, or other storage facility.
  - Directing the flow into a containment or collection area away from the water, if feasible.
  - Placing containment boom or sorbent material around area (provided that a safe operating environment exists).
- _____ If the product enters the water and a safe operating environment exists, try to contain by:
  - Deploying spill response equipment (facility and/or contract) to prevent/ mitigate spill impact (spreading of spill).
  - Attempting to divert/contain the spill:
    - In quiet area or low current areas of the water.
    - Away from strong winds or in areas that could be affected by change in wind direction.
    - Away from areas of hazard to public, property improvements, marinas, water intakes, etc.
- _____ In the event of a gasoline spill, prevent any personnel or boats from entering area. Do not attempt to collect or contain product that has entered waterway.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

MARINE OPERATION SPILLS/LEAKS, (Cont'd)

- _____ Make all necessary repairs.
- _____ Return the line/vessel to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0 and the ACP. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.
- _____ Request local authorities (USCG, Marine Patrol, Harbor Police, etc.) to establish traffic control in the area, as the situation demands.
- _____ Inform local operators such as utilities, telephone company, railway as necessary.
- _____ Complete follow-up and written reporting, as the situation demands.

Note: Overall response operations will be conducted under the Incident Command System with adequate Facility and Contract Response personnel to continue operations for a minimum of seven (7) days.

ABNORMAL PIPELINE OPERATIONS

- _____ If operating design limits have been exceeded (increase or decrease pressure or flow) and no emergency condition exists, stop operations and immediately investigate the pipeline.
- _____ Verify whether a true safety problem, equipment malfunction, or operator error is present.
- _____ If the situation is due to malfunctioning equipment, can transfer operations continue safely? If yes, begin MOC Process, when complete then bypass the faulty equipment until the completion of the transfer and make appropriate repairs. **Note: In all cases, safety to operations, the general public, and property will govern actions taken**.
- _____ If the transfer can not continue safely, make appropriate repairs before continuing operations. **Note: Corrective action will only be done by qualified personnel to perform the type of work involved.**
- _____ Monitor affected systems until normal operations are resumed.
- _____ Inform local operators such as utilities, telephone, and/or railway as necessary.
- _____ Complete follow-up and written reporting, as the situation demands.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

EQUIPMENT FAILURE

- _____ Shut down all engines/motors.
- _____ Close upstream and downstream block valves. If applicable, use pumps on the line or vacuum trucks to remove product.
- _____ Utilize Combustible Gas Indicator, O_2 meter, proper colorimetric indicator and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- _____ If safe to do so, mitigate spreading of the product, as the situation demands. Potential containment strategies include:
  - Earthen dike/berm
  - Ditching
  - Spreading sorbent material over the spill
- _____ Prevent the spill from entering areas such as waterways, storm and process sewers, etc. to the greatest extent possible.
- _____ If located within containment area, insure that drainage valve(s) is “closed”.
- _____ Drain the line section, as the situation demands.
- _____ Request Internal Security or local authorities to establish traffic control in the area, as the situation demands.
- _____ Make all necessary repairs.
- _____ Return the line/rack to service when repairs are complete.
- _____ Clean up spilled product to eliminate any possible environmental problems. Be alert for underground cables.
- _____ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection, diversion, and recovery actions.
- _____ Inform local operators such as utilities, telephone company, railway as necessary.
- _____ Complete follow-up and written reporting, as the situation demand

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

EXPLOSIONS AND/OR FIRE

INDIVIDUAL DISCOVERING THE FIRE - (All Employees)

- _____ Call security control at extension 1399.
- _____ Security control initiates the refinery alarm system.
- _____ Security control initiates activation by request of Shift Safety Personnel, the Incident Management Team (IMT) and/or Volunteer Emergency Response Team (VERT), internal and external notifications.
- _____ Secure the operation by activating emergency shutdown procedures, close valves, etc., if safe to do so.
- _____ Notify Refinery Management or the supervisor on duty.
- _____ Return to the scene of the fire and, if safe, attempt to extinguish same with the nearest fire equipment available.
- _____ In the event the fire is too large for an individual to fight alone, the individual sounding the alarm or making the phone call should stand by at a safe distance to direct the VERT to the scene of the fire and keep personnel and vehicles from entering the danger area.
- _____ Drivers with trucks at or near the incident should turn off truck and report to assigned muster, rally, or evacuation point(s) and await further instructions.
- _____ For dock fires, cease all marine and transfer operations. Close all manifold valves and secondary valves pertaining to the dock. Prepare foam system while awaiting arrival of the VERT and ensure that gates are open for emergency vehicles.
- _____ For ground fires, apply cooling water to all flame exposed metal. Stop the flow of product feeding the fire.
- _____ Evacuate area, as the situation demands.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

EXPLOSIONS AND/OR FIRE, (Cont'd)

INDIVIDUAL DISCOVERING THE FIRE (in the absence of Supervision)

- _____ In the event of fire in the absence of a member of supervision or the Refinery Operator, any PRSI employee on duty is designated as the individual in charge until relieved of duty.
- _____ The individual discovering the fire will adhere to the instructions issued in the PRSI EAP.
- _____ Ensure security control (1399) and immediate supervision is notified by telephone or radio.
- _____ Prior to the arrival of a member of supervision, the individual will remain in charge and will direct the VERT to the scene of the fire.

All personnel are reminded that outsiders other than emergency services will not be allowed in the Refinery during the time of an emergency, and that no statements will be issued to the media or other interested parties except by designated Refinery management. Be courteous with media representatives and direct them to the designated spokesman.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

VAPOR CLOUD (from a massive spill, line rupture, etc.)

- _____ The person who discovers the vapor cloud will notify the security control at extension 1399 or ER, Radio Channel #1 or supervisor on duty and vacate the area.
- _____ **Remember: the only proper action in the presence of a vapor cloud is to get away from it. Do not shut off electrical equipment.**
- _____ All personnel will report to the evacuation rally point (north, south, east or west) for roll call and further instructions.
- _____ After all personnel have been accounted for Security Control, Refinery Management, Supervisor, or Gauger/Operator will initiate the following actions as deemed necessary:
  1. Notify the Security Control at extension 1399.
  2. Shut down transfer operations.
  3. Evacuation of adjacent property.
  4. Only the fire department will be permitted to enter the affected area.
- _____ Contact the appropriate agencies and potentially affected neighbors (refer to Figure 2.5).

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS
for
GASOLINE SPILLS, LINE BREAKS OR TANKS

Flash Point Range: ***Below 100^{o}F***

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Phases Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. ***The following are intended for guideline purposes only.***

These materials float on water and are extremely flammable. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to minimize impact to water and protect shorelines (storm sewers, creeks, rivers, etc.) from contamination, allow evaporation to occur, and contain/clean-up remaining product.

___ Identify source and stop discharge if possible.

___ Make appropriate notifications to regulatory agencies and internal PRSI Management/Environmental Support. (Refer to Figure 2.5 for notifications.)

___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.

___ Eliminate sources of vapor ignition.

___ Stay upwind and evacuate nonessential personnel.

___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.

___ Minimize area of surface soil impacted by free product (e.g. damming). Contact with surface runoff or standing water should be prevented whenever possible.

___ Recover pooled hydrocarbon as soon as possible.

___ Free hydrocarbons may be floated with water to aid recovery if increased vapors and agitation can be avoided. The water will act as a barrier to reduce further infiltration of pure hydrocarbon into the soil. (NOTE: This water will later have to be removed and probably treated.)

___ If free hydrocarbon **IS NOT** present, do not add water to the impacted area.

FIGURE 3.2 (Cont'd)

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS
for
GASOLINE SPILLS, LINE BREAKS OR TANKS

___ Remove heavily impacted soil (saturated with hydrocarbons, or very strong hydrocarbon smell) as soon as possible after product/water removal.

___ Place in a bin/rolloff or a waste pile lined on the bottom and covered on the top with plastic sheeting to prevent contact with rainwater and contamination of other areas.

___ Drums may be used for very small spill cleanups.

___ If removal of heavily-impacted soil is delayed or contaminated soil is left in place pending final disposition, the following action should be taken if the possibility of rain exists to minimize contact with rainfall:

- ___ Cover area with plastic sheeting, overlap seams, weigh down with sandbags;
- ___ Use shallow ditches to divert rainwater around contaminated site; and
- ___ Promptly remove any rainwater that does accumulate on the site.

___ The following steps should be taken together with Environmental Support to minimize long term risk from the site:

- ___ Sample contaminated soil still in place;
- ___ Characterize and dispose of removed soil;
- ___ Estimate proper cleanup target;
- ___ Remove and dispose of more soil, if necessary;
- ___ Install groundwater monitoring wells or monitor existing wells, if necessary; and
- ___ Provide follow-up communication with regulatory agencies, if necessary.

___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.

___ Due to the low flash point of these products: (1) Use non-sparking systems, (2) Have fire trucks or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate to the greatest extent possible.

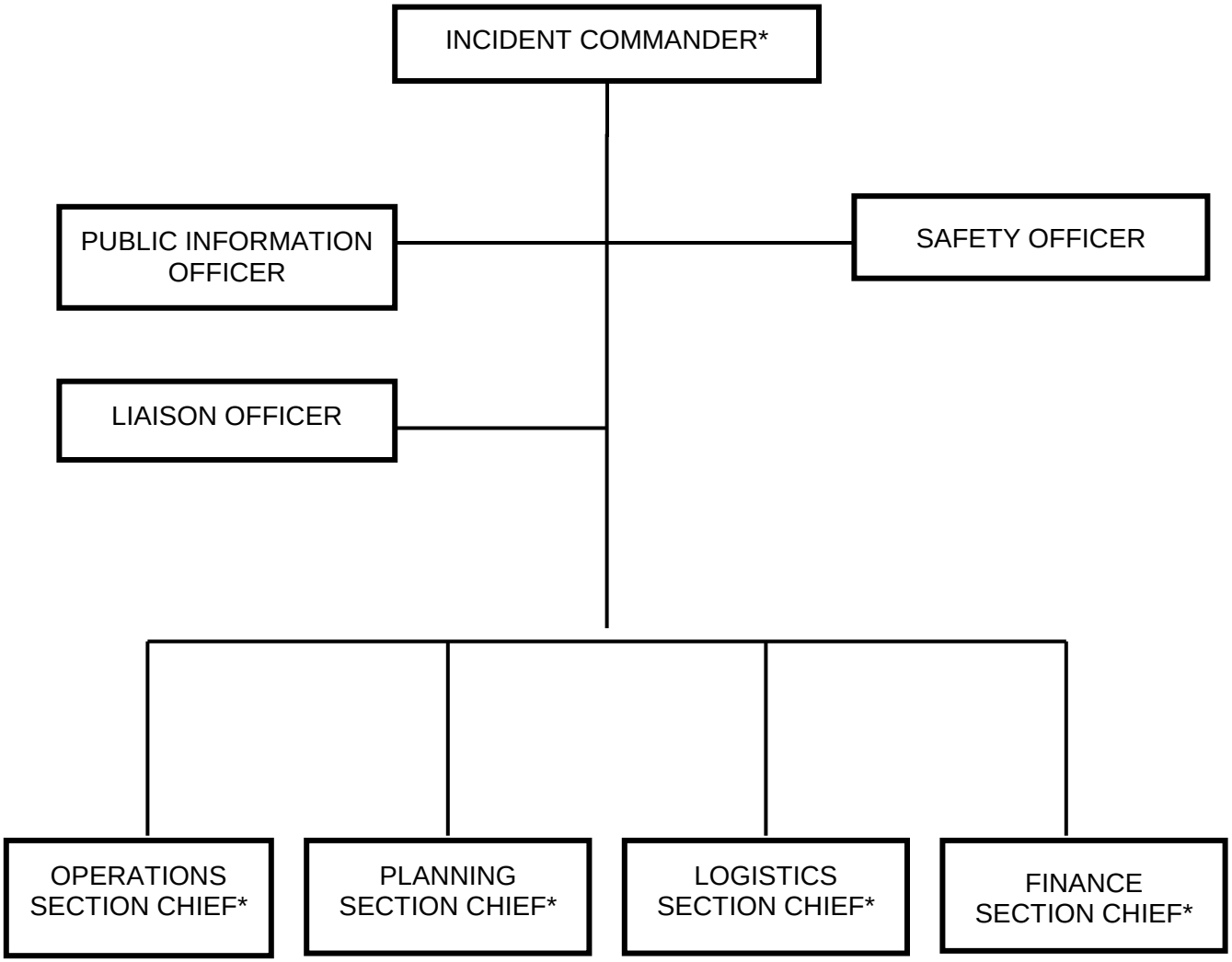
___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.3 for an overview of the area.

___ Request local authorities to establish traffic control in the area and to post a "High Flammability" advisory, as the situation demands.

___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

FIGURE 4.1

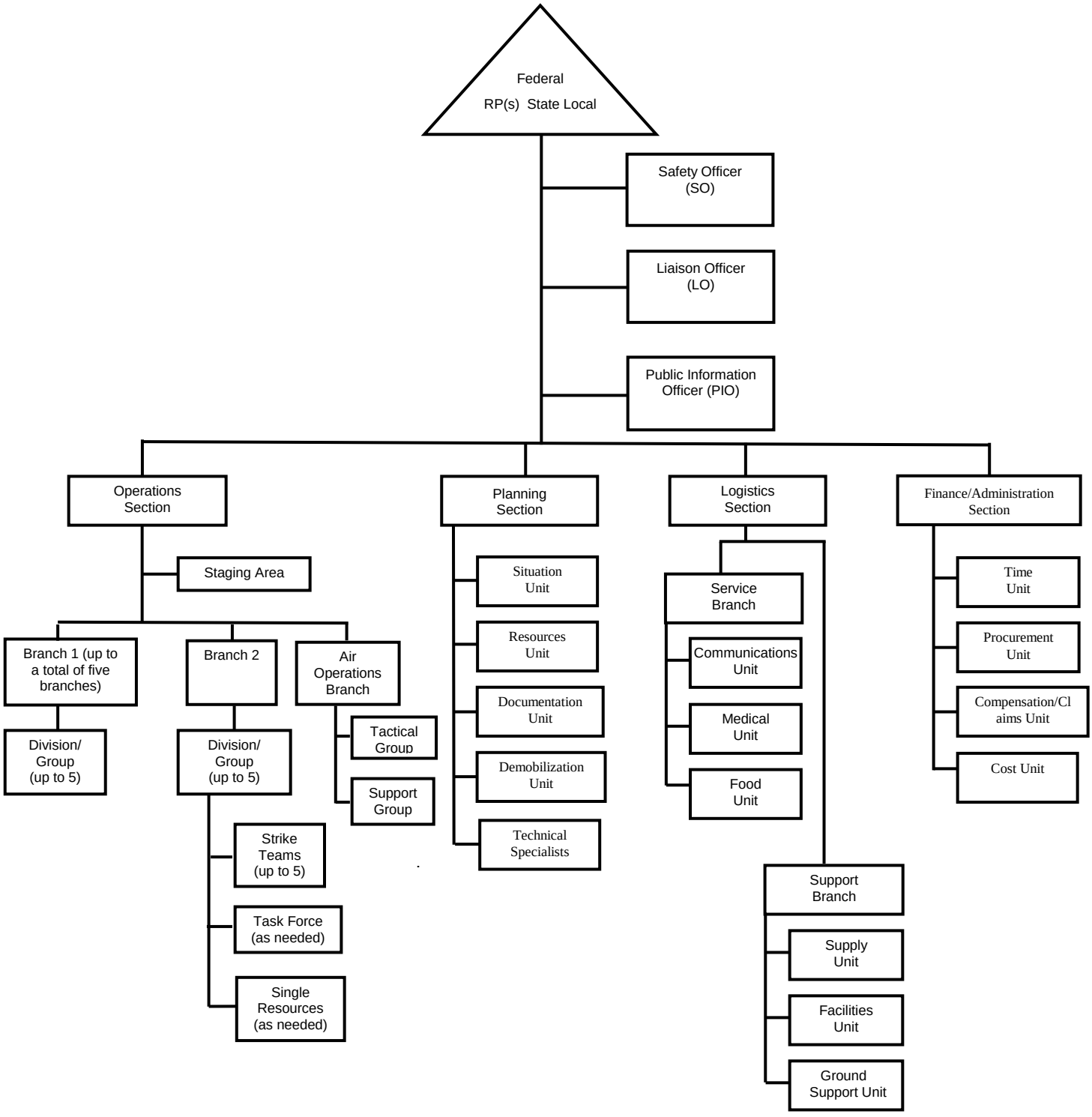
INCIDENT MANAGEMENT TEAM
(Level 1 or Level 2 Incidents)



* NOTE: Incident Management Team (IMT) personnel can assume any of these positions as necessary.

FIGURE 4.2

PASADENA REFINING SYSTEM, INC.
INCIDENT MANAGEMENT TEAM
(Level 2 or Level 3)



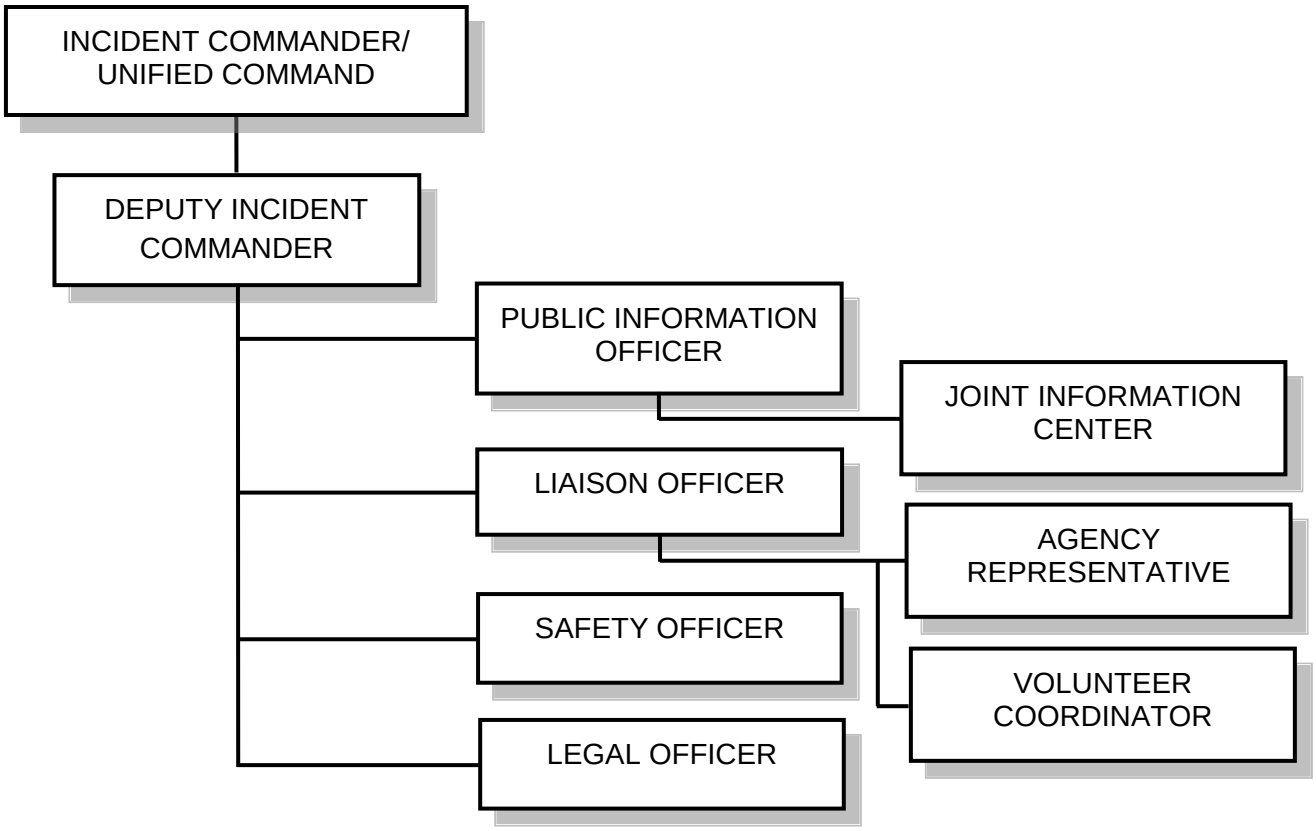
Corporate Support and/or Witt O'Brien's to provide staff in a manner commensurate with required spill cleanup operations.

INCIDENT MANAGEMENT TEAM ROLES AND RESPONSIBILITIES
COMMON RESPONSIBILITES

Upon check-in, receive briefing from Incident Commander (IC), Section Chief, Unit Leader, or Branch Director as appropriate.

- Determine status of unit activities.
- Participate in meetings as appropriate.
- Comply with all safety practices and procedures, and report unsafe conditions to your immediate supervisor and the Safety Officer (SOFR).
- Use clear text and ICS terminology in all radio communications – no codes.
- Complete forms and reports required of assigned position.
- Ensure proper disposition of incident documentation as directed by the Documentation Unit.
- Determine resource needs.
- Order additional unit staff as appropriate.
- Confirm dispatch and estimated time of arrival of staff and supplies.
- Assign duties to and supervise staff.
- Maintain accountability for assigned personnel with regard to exact location(s), personal safety, and welfare at all times, especially when working in or around incident response operations.
- Ensure equipment is operational prior to each work period.
- Supervise demobilization of unit, including storage of supplies.
- Provide the Supply Unit Leader (SPUL) with a list of supplies to be replenished.
- Maintain unit records, including a Unit Log (ICS 214).
- Maintain a personal log of actions, decisions, and events if desired.

COMMAND


INCIDENT COMMANDER/ UNIFIED COMMAND
DEPUTY INCIDENT COMMANDER
PUBLIC INFORMATION OFFICER
JOINT INFORMATION CENTER
LIAISON OFFICER
AGENCY REPRESENTATIVE
SAFETY OFFICER
VOLUNTEER COORDINATOR
LEGAL OFFICER

INCIDENT COMMANDER (IC)

The Incident Commander's (IC) responsibility is the overall management of the incident. The IC is selected based on qualifications and experience.

The IC may have Deputy ICs, who may be from the same organization or from an assisting agency. The Deputy IC must have the same qualifications as the IC, as they must be ready to take over that position at any time. When span of control becomes an issue for the IC, a Deputy IC may be assigned to manage the Command Staff.

The major responsibilities of the IC are:

- Review Common Responsibilities.
- Assess the situation and/or obtain a briefing from the prior IC (ICS 201).
- Determine incident objectives and general direction for managing the incident.
- Establish priorities.
- Establish an appropriate ICS organization.
- Establish an Incident Command Post (ICP).
- Brief Command Staff and Section Chiefs.
- Ensure planning meetings are scheduled as required.
- Approve and authorize the implementation of an Incident Action Plan (IAP).
- Approve the Site Safety and Health Plan, if developed.
- Ensure that adequate safety measures are in place.
- Coordinate activity for all Command and General Staff.
- Identify and coordinate with key people and officials.
- Approve requests for additional resources or for the release of resources.
- Keep agency administrator informed of incident status.
- Approve the use of trainees, volunteers, and auxiliary personnel.
- Authorize release of information to the news media.
- Ensure incident Status Summary (ICS 209) is completed and forwarded to appropriate higher authority.

INCIDENT COMMANDER (IC) (Cont'd)

- Order the demobilization of the incident when appropriate.
- Maintain Unit Log (ICS 214) and Forward to the Documentation Unit Leader (DOCL) for disposition.
- Assign any of the IC roles and responsibilities to a Deputy IC as needed.

LEGAL OFFICER

- Review Common Responsibilities.
- Participate in planning meetings, if requested.
- Advise on legal issues relating to in-situ burning, use of dispersants, and other alternative response technologies.
- Advise on legal issues relating to differences between Natural Resource Damage Assessment (NRDA) and response activities.
- Advise on legal issues relating to investigations.
- Advise on legal issues relating to finance and claims.
- Advise on legal issues relating to response.
- Maintain Unit Log (ICS 214) and forward to DOCL for disposition.

LIAISON OFFICER (LOFR)

Incidents that are multi-jurisdictional, or have several organizations involved, may require the establishment of the Liaison Officer (LOFR) position on the Command Staff. The LOFR is a conduit of information and assistance between organizations and does not normally have delegated authority to make decisions on matters affecting an organization's participation in the incident.

The major responsibilities of the LOFR are:

- Review Common Responsibilities.
- Serve as the primary coordinator for the liaison network, including Agency Representatives (AREP) and state, tribal, and local governments.
- Maintain a list of assisting and cooperating agencies and AREPs, including name, agency and contact information. Monitor check-in sheets daily to ensure that all AREPs are identified.
- Assist in establishing and coordinating interagency contacts.

LIAISON OFFICER (LOFR) (Cont'd)

- Participate in Command and General Staff Meetings, Planning Meetings, Operations Briefings, and other meetings and briefings as required.
- Assist in development of the Information Management Plan.
- Develop stakeholder coordination plan, including periodic public meeting schedules, if needed.
- Implement the Information Management Plan.
- Keep organizations supporting the incident response aware of incident status.
- Arrange consultations with federally recognized tribes as appropriate.
- Monitor incident operations to identify current or potential inter-organizational problems.
- Determine the need for a Volunteer Coordinator.
- Coordinate response resource needs for Natural Resource Damage Assessment (NRDA) activities with the Operations Section Chief (OSC) during oil spill and hazardous substance release responses.
- Coordinate response resource needs for incident investigation activities with the OSC.
- Coordinate with PIO on media and stakeholder communications about risk perceptions.
- Coordinate information sharing and distribution with the PIO.
- Coordinate with PIO to develop and implement social media strategy by providing input on social media uses and interface with stakeholders and the public.
- Coordinate with the Environmental unit Leader to address stakeholder and public risk perceptions by assessing pollutant/hazard situation and obtaining technical content for stakeholder engagement.
- Coordinate activities of visiting dignitaries.
- Brief Command on agency issues and concerns.
- Ensure that all required agency forms, reports and documents are completed prior to demobilization.
- Have debriefing session with the IC prior to demobilization.
- Maintain Unit Log (ICS 214) and forward to DOCL for disposition.

SAFETY OFFICER (SOFR)

The Safety Officer (SOFR) is to develop and recommend measures to ensure personnel safety and occupational health of not only response workers, but also the public, and to anticipate, recognize, assess, and control hazardous and unsafe conditions or situations.

There is only one SOFR for each incident; however, the SOFR may have Assistance Safety Officers (ASOFs), or Technical Specialists (THSPs) as needed.

The major responsibilities of the SOFR are:

- Review Common Responsibilities.
- Ensure an incident-specific Health and Safety Plan, required by 29 CFR 1910.120, is developed specifically for the incident response. The Site Safety and Health Plan (ICS 208-CG) is a tool designed to assist in meeting the requirements of a HASP under 29 CFR 1910.120.
- Participate in Tactics and Planning Meetings, and other meetings and briefings as required.
- Identify hazardous situations associated with the incident.
- Review the Incident Action Plan (IAP) for safety and occupational health implications.
- Provide safety and occupational health advice in the IAP for assigned responders.
- Use Risk Based Decision Making (RBDM) methodologies to conduct Operational Risk Management (ORM) for the incident.
- Develop and implement intervention measures to prevent unsafe acts.
- Stop observed or reported unsafe acts. (Seek guidance and clarity from the IC/UC on the scope and limitation of authority.)
- Investigate accidents that have occurred within the incident area and determine if new safety and occupational health measures are needed.
- Identify, communicate and document safety, occupational, and environmental health hazards, needs, and concerns.
- Track and report accidents, injuries, and illnesses.
- Support reporting of accidents and mishaps using the Incident Mishap Reporting Record (ICS 237).
- Ensure all contractors and volunteers hired/brought in, meet and are aware of appropriate safety/health training levels, the HASP, and safety/health measures to achieve the response strategies. (A translator may be needed to achieve this goal.)
- Identify the need for and assign deputies, assistants, and THSPs as needed.

SAFETY OFFICER (SOFR) (Cont'd)

- Review and provide input to the Medical Plan (ICS 206).
- Review and provide input to the traffic plan, if developed, for both land and vessel traffic.
- Develop the Incident Action Plan Safety Analysis (ICS 215a) to document hazards as well as mitigation strategies.
- Serve as the IC/UC representative in meetings with federal, state, or local occupational safety and health authorities and stakeholders.
- Brief Command on safety and occupational health issues and concerns.
- Ensure that all required organization forms, reports, and documents are completed prior to demobilization.
- Have debriefing session with the IC prior to demobilization.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

PUBLIC INFORMATION OFFICER (PIO)

The Public Information Officer (PIO) is responsible for developing and releasing information about the incident to the media and public. The PIO may have assistants as necessary, and the assistants may come from other assisting organizations.

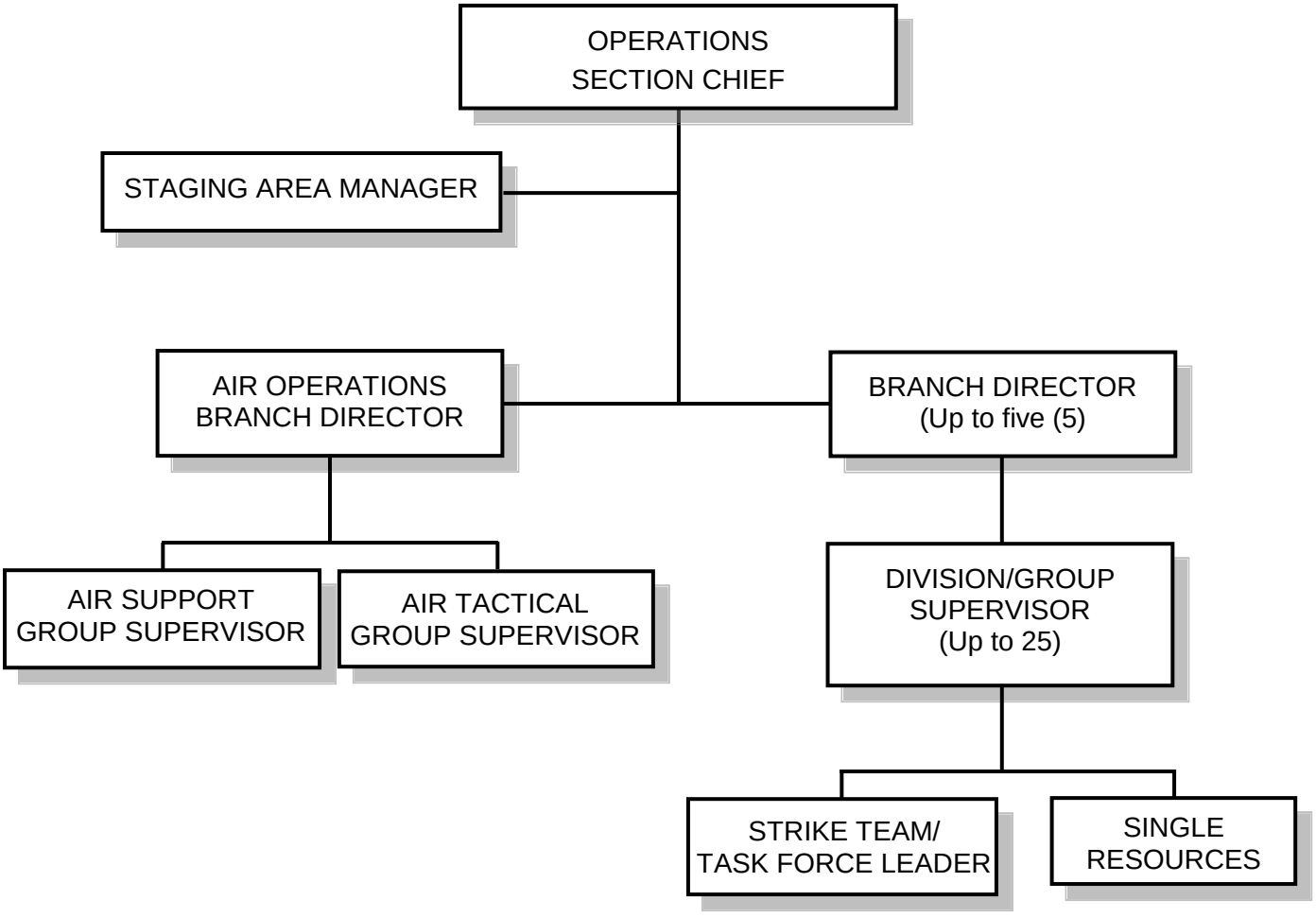
The major responsibilities of the PIO are:

- Review Common Responsibilities.
- Determine from the IC if there are any limits on information release.
- Develop media strategy and public information plan.
- Represent and advise the IC on all public information matters relating to the incident.
- Develop material for use in media briefings.
- Obtain IC approval of media releases.
- Inform media and conduct media briefings.
- Monitor and utilize social media as approved by the IC.
- Arrange tours, interviews and briefings.
- Coordinate information sharing and distribution with the LOFR.

PUBLIC INFORMATION OFFICER (PIO) (Cont'd)

- Assist in development of the Information Management Plan.
- Manage the Joint Information Center (JIC) if established.
- Assign a JIC manager if a JIC is established.
- Evaluate the need to establish JICs at additional locations.
- Obtain media information that may be useful to incident planning.
- Maintain current information summaries and/or displays on the incident and provide information on the status of the incident to assigned personnel.
- Brief Command on PIO issues and concerns.
- Coordinate with the Environmental Unit Leader and LOFR to address media and stakeholder risk perceptions and obtain technical content for external messages.
- Ensure that all required organization forms, reports and documents are completed prior to demobilization.
- Have debriefing session with the IC prior to demobilization.
- Maintain Unit Log (ICS 214) and forward to Documentation Unit Leader (DOCL) for disposition.

OPERATIONS


OPERATIONS
SECTION CHIEF
STAGING AREA MANAGER
AIR OPERATIONS
BRANCH DIRECTOR
BRANCH DIRECTOR
(Up to five (5)
AIR SUPPORT
GROUP SUPERVISOR
AIR TACTICAL
GROUP SUPERVISOR
DIVISION/GROUP
SUPERVISOR
(Up to 25)
STRIKE TEAM/
TASK FORCE LEADER
SINGLE
RESOURCES

OPERATIONS SECTION CHIEF (OSC)

The Operations Chief is responsible for the management and implementation of spill response strategies pertaining to containment, protection, removal and disposal directly related to the primary mission.

The major responsibilities of the OSC are:

- Review Common Responsibilities.
- Obtain briefing from IC.
- Evaluate and request sufficient Section supervisory staffing for both operational and planning activities.
- Supervise Operations Section field personnel.
- Implement the Incident Action Plan (IAP) for the Operations Section.
- Evaluate on-scene operations and make adjustments to organization, strategies, tactics, and resources as necessary.
- Ensure the Resource Unit Leader (RESL) is advised of changes in the status of resources assigned to the Operations Section.
- In coordination with the Safety Officer (SOFR), ensure that Operations Section personnel execute work assignments while following approved safety practices.
- Monitor the need for and request additional resources to support operations as necessary.
- Assemble and/or demobilize Branches, Divisions, Groups, and task force/strike teams as appropriate.
- Identify and use staging areas.
- Evaluate and monitor the current situation for use in next operational planning period.
- Convert operational incident objectives into strategic and tactical options, which may be documented on a Work Analysis Matrix (ICS 234).
- Coordinate and consult with the Planning Section Chief (PSC), SOFR, Marine Transportation System Recovery Unit Leader (MTSL), Technical Specialists (THSPs), modeling scenarios, trajectories, etc., on selection of appropriate strategies and tactics to accomplish objectives.
- Identify kind, type, and number of resources required to support selected strategies.
- Determine the need for any specialized resources.
- Divide work areas into manageable units.
- Implement air space de-confliction plans as required.

OPERATIONS SECTION CHIEF (OSC) (Cont'd)

- Determine the need for an Air Branch Director.
- Request Captain of the Port (COTP) Safety or Security Zone or FAA Temporary Flight Restriction declaration around/over the incident response zone when warranted.
- Develop work assignments and allocate tactical resources based on strategic requirements using the Operational Planning Worksheet (ICS 215).
- Coordinate the development of the Operational Planning Worksheet (ICS 215) with the SOFR to mitigate safety risks.
- Participate in the planning process and the development of the tactical portions of the IAP, including the Assignment List (ICS 204) and Air Operations Summary (ICS 220).
- Review and approve final Assignment List (ICS 204(s)) prior to IAP approval.
- Assist with development of long-range strategic, contingency, and demobilization plans.
- Develop recommended list of Operations Section resources to be demobilized and initiate recommendation for release when appropriate.
- Receive and implement applicable portions of the incident Demobilization Plan.
- Participate in operational briefings to IMT members as well as briefings to the media and visiting dignitaries.
- Maintain Unit Log (ICS 214) and forward to Documentation Unit Leader (DOCL) for disposition.

OPERATIONS BRANCH DIRECTORS (OPBD)

The Operations Branch Directors (OPBDs) when activated, are under the direction of the Operations Section Chief, and are responsible for the implementation of the Incident Action Plan appropriate to Operations Branch.

The major responsibilities of the OPBD are:

- Review Common Responsibilities.
- Identify Divisions (DIVS), Groups, and resources assigned to the Operations Branch.
- Ensure that DIVS have a copy of the IAP.
- Implement IAP for the Operations Branch.
- Provide the OSC alternative or contingency strategies and tactics, including a list of additional resources needed in the Staging Area.
- Review the Assignment List (ICS 204) for Divisions/Groups within the Operations Branch and modify the lists based on the effectiveness of current operations.
- Assign specific work tasks to DIVS.
- Supervise Operations Branch operations.
- Resolve logistic problems reported by subordinates.
- Attend Planning Meetings as requested by the OSC.
- Ensure that the Resource and Situation Units are advised of changes in the status of resources assigned to the Operations Branch through the chain of command.
- Report to OSC when the IAP is to be modified, additional resources are needed, surplus resources are available, or hazardous situations or significant events occur.
- Approve accident and medical reports (home agency forms) originating within the Operations Branch.
- Evaluate the demobilization of excess resources well in advance of demobilization.
- Assemble and demobilize Branches, Divisions, Groups, and task force/strike teams as appropriate.
- Debrief with OSC and/or as directed at the end of each shift.
- Maintain Unit Log (ICS 214) and forward to DOCL for disposition.

AIR OPERATIONS BRANCH DIRECTOR (AOBD)

The Air Operations Branch Director (AOBD) is ground-based and primarily responsible for preparing the Air Operations Summary (ICS 220) and the air operations portion of the IAP, and for providing logistical support and direction to aircraft and personnel supporting incident response. The Air Operations Summary (ICS 220) serves a similar purpose as the Assignment List (ICS 204) by assigning and managing aviation resources on the incident.

The creation of an Air Operations Branch should be considered only after the number of air resources exceeds what would be assigned to an Air Operations Group.

The major responsibilities of the AOBD are:

- Review Common Responsibilities.
- Organize preliminary air operations.
- Supervise all air operations activities associated with the incident.
- Report to the OSC on air operations activities.
- Implement FAA air space closure and air space deconfliction plans to conduct operations as required.
- Oversee creation of air task orders or flight schedules to mitigate safety risk of aircraft operations in confined or saturated air space.
- Coordinate airspace use with the FAA.
- Request declaration or cancellation of Temporary Flight Restrictions (TFRs) in accordance with applicable Federal Aviation Regulations and post Notice to Airmen (NOTAM).
- Attend the Tactics and Planning Meetings to exchange information for development of the Air Operations Summary (ICS 220) and to confirm the number and type of aircraft needed for the next operational period.
- Participate in preparation of the IAP through the OSC, ensuring that the air operations portion includes the Air Traffic Control (ATC) requirements of assigned aircraft.
- Coordinate with the Communications Unit Leader (COML) to designate air tactical and support frequencies.
- Ensure reliable communication between the Air Operations Branch and air units.
- Perform operational planning for air operations including emergency evacuation procedures of injured responders.
- Prepare the Air Operations Summary (ICS 220), and provide the summary along with incident maps and copies of the IAP to the Air Support Group and Fixed-Wing Bases.

AIR OPERATIONS BRANCH DIRECTOR (AOBD) (Cont'd)

- Develop an aviation site safety plan in coordination with SOFR.
- Consider requesting an Aviation Safety Officer (ASOF) with aviation safety certifications to work within the Air Operations Branch as a Technical Specialist (THSP) or for the SOFR.
- Report safety concerns, special incidents, and accidents to the SOFR.
- Evaluate helibase and helispot locations.
- Establish procedures for emergency reassignment of aircraft.
- Coordinate approved flights of non-incident aircraft in the TFRs.
- Manage airspace deconfliction.
- Coordinate with appropriate Command Centers and the remote sensing coordinator through normal channels on incident air operations activities.
- Coordinate with trustee agencies and Environmental Unit Leader (ENVL) on flight restrictions and recommendations regarding threatened or endangered species and/or indigenous and migrating birds.
- Consider requests for logistical use of incident aircraft.
- Facilitate aircrew debriefs by Intelligence/Investigations Officer (INTO), Situation Unit Leader (SITL), Field Observers (FOBS), etc.
- Arrange for an accident investigation team when warranted.
- Implement noise abatement procedures as necessary.
- Debrief OSC at the end of each operational period as directed.
- Maintain a Unit Log (ICS 214-CG) and forward to the DOCL for disposition.

DIVISION SUPERVISOR (DIVS)

The Division/Group Supervisor (DIVS) reports to the OSC (or OPBD when activated). The DIVS is responsible for the implementation of the assigned portion of the IAP, assignment of resources within the Division/Group, and reporting on the progress of control operations and status of resources within the Division/Group.

The major responsibilities of the DIVS are:

- Review Common Responsibilities.
- Identify resources assigned to the Division/Group.
- Provide the IAP to subordinates, as needed.
- Review Division/Group assigned tasks and incident activities with subordinates.
- Implement the IAP for Division/Group.
- Assemble and demobilize task force/strike teams as appropriate.
- Supervise Division/Group resources and make changes as appropriate.
- Ensure that RESL is advised of all changes in the status of resources assigned to the Division/Group through the chain of command.
- Coordinate activities with adjacent Division/Group.
- Determine the need for assistance on assigned tasks.
- Submit situation and resource status information to the Branch Director or the OSC as directed.
- Coordinate with Field Observers (FOBS) assigned by the Situation Unit Leader (SITL).
- Report hazardous situations, special occurrences, or significant events (*e.g.*, accidents, mishaps, sickness, and discovery of unanticipated sensitive resources) to immediate supervisor and SOFR.
- Ensure that assigned personnel and equipment get to and from assignments in a timely and orderly manner.
- Resolve logistics problems within the Division/Group.
- Participate in the development of Branch plans for the next operational period, as requested.
- Evaluate the demobilization of excess resources well in advance of demobilization.
- Debrief as directed at the end of each shift.
- Maintain Unit Log (ICS 214) and forward to DOCL for disposition.

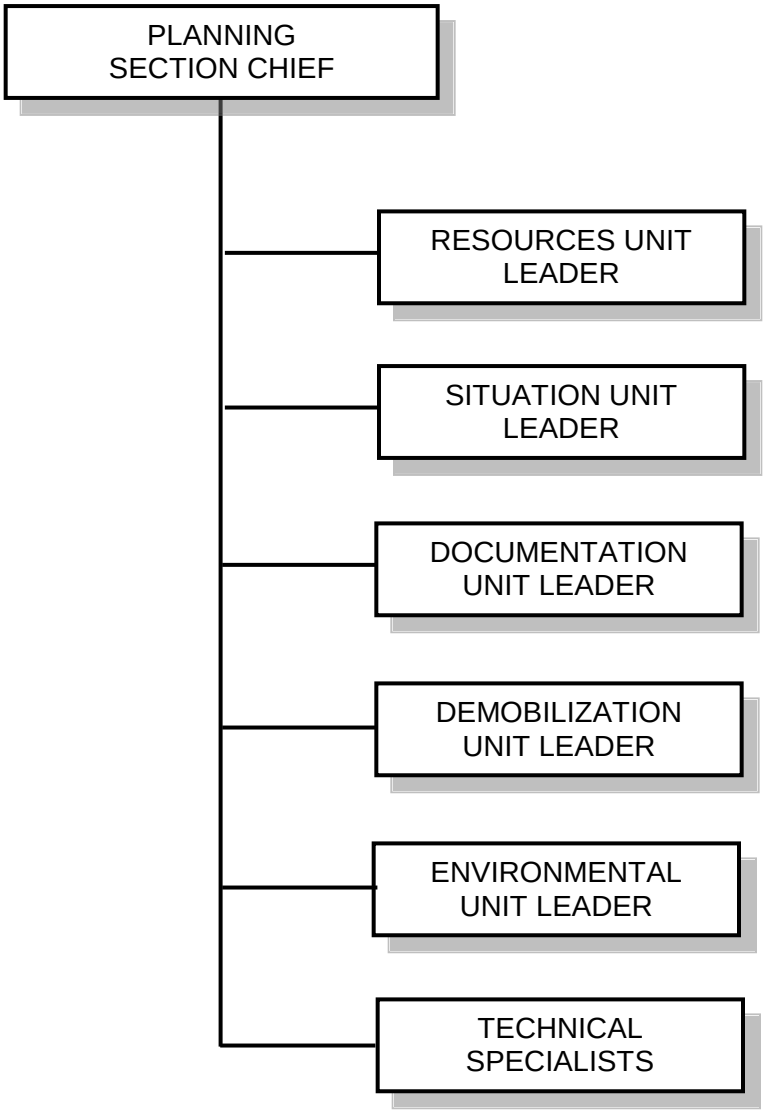
STAGING/GROUP AREA MANAGER (STAM)

The Staging Area Manager (STAM) is under the direction of the OSC and is responsible for managing all activities within a Staging Area.

The major responsibilities of the STAM are:

- Review Common Responsibilities.
- Proceed to staging area.
- Obtain briefing from person you are relieving.
- Establish staging area layout.
- Determine any support needs for equipment, support staff, feeding, sanitation, and security.
- Establish check-in function as appropriate.
- Ensure security of staged resources using assets with authority, jurisdiction, and adequate capabilities to provide security.
- Establish check-in areas for identification and traffic control.
- Request maintenance service for equipment at staging area as appropriate.
- Respond to requests for resource assignments. (Note: Requests may be directly from the OSC or via the Incident Communications Center (ICC).)
- Obtain and issue receipts for supplies distributed and received at staging area. (*i.e.* radio equipment).
- Determine required resource levels from the OSC.
- Advise the OSC when reserve levels reach minimums.
- Maintain and provide status to Resource Unit of all resources in staging area.
- Maintain staging area in orderly condition.
- Coordinate with Field Observers (FOBS) assigned by the Situation Unit Leader (SITL).
- Ensure resources that are in the staging area and are scheduled for demobilization follow the Demobilization Plan if developed.
- Demobilize the staging area in accordance with the Demobilization Plan, or per OSC direction when no Demobilization Plan has been developed.
- Debrief with OSC or as directed at the end of each shift.
- Maintain Unit Log (ICS 214) and forward to DOCL for disposition.

PLANNING


PLANNING
SECTION CHIEF
RESOURCES UNIT
LEADER
SITUATION UNIT
LEADER
DOCUMENTATION
UNIT LEADER
DEMOBILIZATION
UNIT LEADER
ENVIRONMENTAL
UNIT LEADER
TECHNICAL
SPECIALISTS

PLANNING SECTION CHIEF (PSC)

The Planning Section Chief (PSC) is a member of the General Staff and responsible for the development of the Incident Action Plan (IAP), the collection, evaluation, dissemination, and use of incident information and maintaining status of assigned and demobilized resources.

The major responsibilities of the PSC are:

- Review Common Responsibilities.
- Collect, process, display, and disseminate incident information.
- Assist Operations Section Chief (OSC) in the development of response strategies.
- Supervise preparation of the IAP.
- Facilitate planning meetings and briefings.
- Supervise the tracking of incident personnel and resources through the Resources Unit.
- Assign personnel already on-site to ICS organizational positions as appropriate.
- Oversee information management processes and plans, including the development and approval of the Information Management Plan (if needed).
- Ensure the accuracy of all information being produced by Planning Section Units with special attention to IC/UC Critical Information Requirements (CIRs) and their reporting requirements.
- Support information requirements and reporting schedules for Planning Section Units (Resources Unit, Situation Unit, etc.).
- Establish special information collection activities as necessary (*e.g.*, weather, environmental, and toxics).
- Assemble information on alternative strategies.
- Provide periodic predictions on incident potential.
- Keep Spill Management Team apprised of any significant changes in incident status.
- Oversee preparation and implementation of the Incident Demobilization Plan.
- Incorporate plans (*e.g.*, traffic, medical, communications, and site safety) into the IAP.
- Develop other incident supporting plans (*e.g.*, salvage, transition, and security).
- Maintain Unit Log (ICS 214) and forward to Documentation Unit Leader (DOCL) for disposition.

DOCUMENTATION UNIT LEADER (DOCL)

The Documentation Unit Leader (DOCL) is responsible for the maintenance of accurate, up-to-date incident documentation which is critical to post-incident analysis.

The major responsibilities of the DOCL are:

- Review Common Responsibilities.
- Set up work area and begin organization of incident files.
- Develop a documentation plan to include archival of all incident specific information data as defined in the Information Management Plan.
- Coordinate with the Communications Unit Leader (COML) to ensure electronically stored information meets legal documentation and archival requirements.
- To the greatest extent possible the data archive should be readily recoverable and searchable.
- Ensure appropriate level of documentation storage is maintained based on the level of classification of the information being stored.
- Maintain the Incident Open Action Tracker (ICS 233).
- Establish duplication service and respond to duplication requests.
- File all official forms and reports.
- Develop a Freedom of Information Act (FOIA) plan in coordination the Liaison Officer (LOFR) and with appropriate legal input.
- Review records for accuracy and completeness, and inform units of errors or omissions.
- Provide incident documentation as requested.
- Organize files for submitting final incident documentation package
- Submit incident documentation to the operational commander for maintenance and disposition.
- Maintain Unit Log (ICS 214).

DEMOBILIZATION UNIT LEADER (DMOB)

The Demobilization unit Leader (DMOB) is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be very complex, requiring a separate planning activity. Note that not all organizations require specific demobilization instructions.

The major responsibilities of the DMOB are:

- Review Common Responsibilities.
- Review incident resource records to determine the likely size and extent of demobilization effort and develop a resource matrix.
- Coordinate demobilization with Agency Representatives (AREPs).
- Monitor the on-going Operations Section resource needs.
- Identify surplus resources and probable release time.
- Establish communications with off-incident facilities, as necessary.
- Develop an Incident Demobilization Plan that should include:

    1. General information section.
    2. Responsibilities section.
    3. Release priorities.
    4. Release procedures (including any unique procedures needed).
    5. Demobilization Checkout Form (ICS 221).
    6. Directory.

- Prepare appropriate directories (*e.g.*, maps and instructions) for inclusion in the demobilization plan.
- Track all demobilized tactical resources and overhead personnel to their home office/location.
- Distribute demobilization plan (on and off-site).
- Provide status reports to appropriate requestors.
- Ensure that sections and units understand their specific demobilization responsibilities.
- Supervise execution of the Incident Demobilization Plan.
- Brief the Planning Section Chief (PSC) on demobilization progress.
- Maintain Unit Log (ICS 214) and forward to Documentation unit Leader (DOCL) for disposition.

SITUATION UNIT LEADER (SITL)

The Situation unit Leader (SITL) is the primary node for information management. The SITL is responsible for collecting, processing, organizing and disseminating incident information relating to status of current operations, incident growth, mitigation, or intelligence activities taking place on the incident. The SITL may prepare future projections of incident growth, maps, and intelligence.

The major responsibilities of the SITL are:

- Review Common Responsibilities.
- Begin collection and analysis of incident data as soon as possible.
- Prepare, post, and disseminate resource and situation status information as required, including special requests.
- Request and direct Display Processor(s) (DPRO) and/or Field Observers (FOBS) as needed.
- Develop the Information Management Plan, as required, in coordination with the Public Information Officer (PIO), Liaison Officer (LOFR), Operations Section chief (OSC), Planning Section Chief (PSC), Logistics Section Chief (LSC), and Communications Unit Leader (COML) for IC/UC approval.
- Collect, process, organize and disseminate incident information relating to status of current operations, incident growth, mitigation, or intelligence activities taking place on the incident.
- Prepare future projections of incident growth, maps, intelligence, and other incident specific predictions as requested by the PSC.
- Coordinate with COML to develop capabilities and capacities to support the information management methodologies.
- Prepare the Incident Status Summary (ICS 209).
- Provide charts, maps, and overlay imagery.
- Conduct situation briefings at meetings and briefings as required by the PSC.
- Develop and maintain master chart(s)/map(s) of the incident.
- Display master chart(s)/map(s) of incident in the Incident Command Post (ICP) common area for all responders to view.
- Maintain Unit Log (ICS 214-CG) and forward to Documentation Unit Leader (DOCL) for disposition.

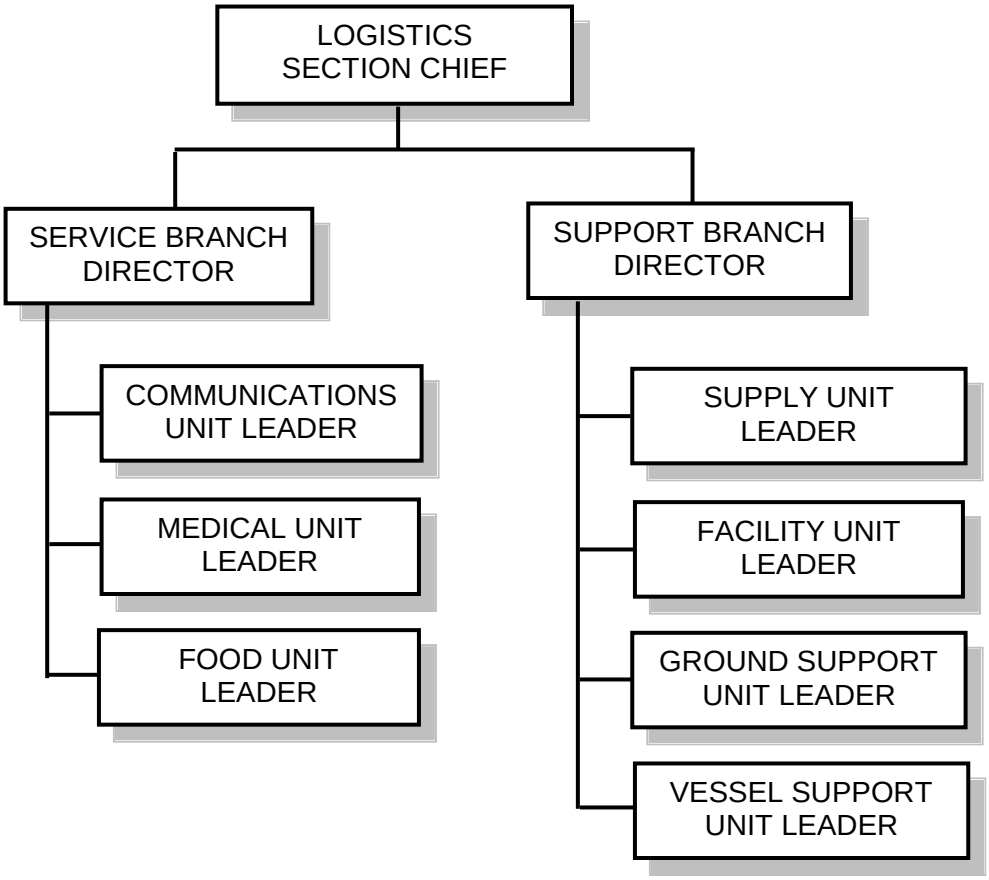
RESOURCE UNIT LEADER (RESL)

The Resource Unit Leader (RESL) is responsible for maintaining the status of all assigned tactical resources and personnel at an incident. This is achieved by overseeing the check-in of all tactical resources and personnel, and using a status system that indicates the current location and status of all these resources.

The major responsibilities of the RESL are:

- Review Common Responsibilities.
- Establish the check-in function at incident locations.
- Prepare the Organization Assignment List (ICS 203) and Incident Organization Chart (ICS 207).
- Prepare appropriate parts of the Assignment List (ICS 204).
- Maintain a master roster of all tactical resources checked in at the incident and post their current status and location using the Resource Status Card (ICS 219) or an electronic resource tracking system.
- Request resources from Logistics Section Chief (LSC) via the Resource Request Message (ICS 213-RR).
- Attend meetings and briefings as required by the PSC.
- Maintain Unit Log (ICS 214-CG) and forward to DOCL for disposition.

LOGISTICS


LOGISTICS SECTION CHIEF
SERVICE BRANCH DIRECTOR
SUPPORT BRANCH DIRECTOR
COMMUNICATIONS UNIT LEADER
MEDICAL UNIT LEADER
FOOD UNIT LEADER
SUPPLY UNIT LEADER
FACILITY UNIT LEADER
GROUND SUPPORT UNIT LEADER
VESSEL SUPPORT UNIT LEADER

LOGISTICS SECTION CHIEF (LOSC)

The Logistics Section Chief (LSC) is a member of the General Staff and is responsible for providing facilities, services, people, and material in support of the incident. The LSC participates in the development and implementation of the IAP and supervises the branches and units within the Logistics Section.

The LSC may have Deputy LSCs. The Deputy LSC must have the same qualifications as the person for whom they work as they must be ready to take over that position at any time.

The major responsibilities of the LSC are:

- Review Common Responsibilities.
- Organize the Logistics Section.
- Assign work locations and work tasks to Section personnel.
- Notify the Planning Section/Resources Unit of activated Logistics Section Units, including names and locations of assigned personnel.
- Assemble and brief Logistics Branch Directors and Unit Leaders.
- Participate in the planning process.
- Determine and supply immediate incident resource and facility needs.
- Coordinate and process requests for additional resources.
- In conjunction with Command, develop and advise all Sections of the Spill Management Team resource request process, the resource approval process, and use of Resource Request form (ICS 213-RR).
- Develop resource ordering process with Finance Section Chief (FSC).
- Review proposed tactics for upcoming operational period to ensure ability to provide resources and logistical support.
- Advise Command and other Section Chiefs on resource availability to support incident needs.
- Identify long-term service and support requirements for planned and expected operations.
- Oversee development of the Communications Plan (ICS 205), Medical Plan (ICS 206), Transportation Plan and Traffic Plan, as required.
- Provide input to the Information Management Plan.
- Identify logistical resource needs for incident contingencies.

LOGISTICS SECTION CHIEF (LOSC) (Cont'd)

- Determine the type and amount of resources ordered and enroute to include reporting of status/location.
- Advise Section Chiefs on resource limitations, constraints, and appropriateness.
- Advise on current service and support capabilities.
- Participate in Business Management Meeting with the FSC.
- Request and/or set up expanded ordering processes as appropriate to support incident.
- Recommend Logistics Section resources to be demobilized and prioritize release order.
- Provide Logistics Section requirements to be included in the Demobilization Plan to Demobilization Unit Leader (DMOB).
- Receive and implement applicable portions of the incident Demobilization Plan.
- Maintain Unit Log (ICS 214) and forward to Documentation Unit Leader (DOCL) for disposition.

SERVICE BRANCH DIRECTOR (SVBD)

The Service Branch Director (SVBD) is activated under the supervision of the LSC and is responsible for the management of all service activities at the incident. The SVBD supervises the operations of the Communications, Medical, and Food Units.

The major responsibilities of the SVBD are:

- Review Common Responsibilities.
- Obtain working materials.
- Determine the level of service required to support operations.
- Confirm dispatch of Branch personnel.
- Participate in planning meetings of Logistics Section personnel.
- Review the Incident Action Plan (IAP).
- Organize and prepare assignments for Service Branch personnel.
- Coordinate activities of Branch Units.
- Inform the LSC of Branch activities.
- Resolve Service Branch problems.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

COMMUNICATIONS UNIT (COML)

The Communications Unit Leader (COML) is responsible for developing plans, obtaining, distributing, and supporting operation of computer and radio incident communications equipment and the data management infrastructure to support information flow.

The major responsibilities of the COML are:

- Review Common Responsibilities.
- Determine Unit personnel needs.
- Supervise Communications Unit activities.
- Support development and implementation of the Information Management Plan.
- Prepare and implement the Incident Radio Communications Plan (ICS 205).
- Obtain communications equipment and data management infrastructure.
- Develop contingency communications.
- Ensure the Incident Communications Center (ICC) and Message Center are established.
- Establish appropriate communications distribution and maintenance locations within the Incident Base.
- Ensure communications systems are installed, tested and maintained.
- Ensure an equipment accountability system is established.
- Ensure personal portable radio equipment from cache is distributed per Incident Radio Communications Plan (ICS 205).
- Establish and maintain the data management infrastructure to include hardware, software, and data to support information management.
- Establish and maintain automatic data processing computer information technology (IT) services for all facilities when available.
- Provide technical information as required on:

    1. Adequacy of communications systems currently in operation.
    2. Geographic limitation on communications systems.
    3. Equipment capabilities and limitations.
    4. Amount and types of equipment available.
    5. Anticipated problems in the use of communications equipment.

- Recover equipment from Units being demobilized.
- Maintain Unit Log (ICS 214) and forward to Documentation Unit Leader (DOCL) for disposition.

MEDICAL UNIT LEADER (MEDL)

The Medical Unit Leader (MEDL), under the direction of the SVBD or LSC, is primarily responsible for the development of the Medical Plan, providing medical care, overseeing health of response personnel, obtaining medical aid and transportation for injured and ill response personnel, coordinating with other functions to resolve health and safety issues, and preparation of medical reports and records.

The major responsibilities of the MEDL are:

- Review Common Responsibilities.
- Participate in Logistics Section/Service Branch planning activities, providing relevant medical input for strategy development.
- Establish the Medical Unit.
- Prepare the Medical Plan (ICS 206).
- Coordinate with the Safety Officer (SOFR), Operations, hazardous substance specialists, and others on proper personnel protection procedures for incident personnel.
- Prepare procedures for major medical emergency.
- Develop transportation routes and methods for injured incident personnel.
- Ensure incident personnel patients are tracked as they move from origin, to the care facility, and to final disposition.
- Provide continuity of medical care for incident personnel.
- Declare major medical emergency as appropriate.
- Provide or oversee medical and rehab care delivered to incident personnel.
- Monitor health of incident personnel including excessive incident stress.
- Respond to requests for medical aid, medical transportation, and medical supplies.
- Prepare and submit authorizations, reports and administrative documentation related to injuries, compensation, or death of incident personnel, in conjunction with Finance/Admin Section.
- Coordinate personnel and mortuary affairs for incident personnel fatalities.
- Provide oversight and liaison for injured response personnel across the emergency medical care system.
- Implement procedures to protect medical records and Personally Identifiable Information (PII) in accordance with the Health Insurance Portability and Accountability Act (HIPAA).
- Maintain Unit Log (ICS 214) and forward to Documentation Unit Leader (DOCL) for disposition.

FOOD UNIT LEADER (FDUL)

The Food Unit Leader (FDUL) is responsible for supplying the food needs for all tactical responders and overhead personnel, including all remote locations such as staging areas, as well as providing food for personnel unable to leave tactical field assignments.

The major responsibilities of the FDUL are:

- Review Common Responsibilities.
- Determine food and water requirements.
- Determine the method of feeding to best fit each facility or situation.
- Obtain necessary equipment and supplies.
- Ensure that well-balanced menus are provided.
- Account for responders who use incident supplied food services.
- Order sufficient food and potable water from the Supply Unit.
- Maintain an inventory of food and water.
- Maintain food service areas, ensuring that all appropriate health and safety measures are being followed.
- Supervise Food Unit personnel as appropriate.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

SUPPORT BRANCH DIRECTOR (SUBD)

The Support Branch Director (SUBD) is activated under the direction of the LSC and is responsible for the development and implementation of logistics plans in support of the IAP. The SUBD supervises the operations of the Supply, Facilities, Ground Support, and Vessel Support Units.

The major responsibilities of the SUBD are:

- Review Common Responsibilities.
- Obtain work materials.
- Identify Support Branch personnel dispatched to the incident.
- Determine support operations in coordination with the LSC and SVBD.
- Prepare organization and assignments for support operations.
- Assemble and brief Support Branch personnel.
- Determine if assigned Support Branch resources are sufficient.
- Track progress of Branch and Unit work assignments.
- Resolve problems associated with requests from the Operations Section.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

SUPPLY UNIT LEADER (SPUL)

The Supply Unit Leader (SPUL) is primarily responsible for receiving, inventorying, storing, and distributing all supplies, tactical resources, and personnel for the incident, including non-expendable supplies and equipment.

The major responsibilities of the SPUL are:

- Review Common Responsibilities.
- Participate in Logistics Section/Support Branch planning activities.
- Receive and respond to requests for personnel, supplies, and equipment.
- Order, receive, distribute, and store supplies and equipment.
- Determine the type and amount of supplies, tactical resources, and personnel ordered and enroute to include reporting of status and location.
- Review the IAP for information on operations of the Supply Unit.
- Develop and implement safety and security requirements.
- Service reusable equipment.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

FACILITIES UNIT LEADER (FACL)

The Facilities Unit Leader (FACL) is primarily responsible for the setup, maintenance and demobilization of incident facilities (*e.g.*, Incident Base, Incident Command Post (ICP) and staging areas), as well as security services required to support incident operations. The FACL provides sleeping and sanitation facilities for incident personnel and manages Incident facility operations. Each facility is assigned a manager who reports to the FACL and is responsible for operation of the facility. The FACL reports to the SUBD.

The major responsibilities of the FACL are:

- Review Common Responsibilities.
- Obtain a briefing from the SUBD or the LSC.
- Receive and review a copy of the Incident Action Plan (IAP).
- Participate in Logistics Section/Support Branch planning activities.
- In conjunction with the Finance/Admin Section, determine locations suitable for incident support facilities and secure permission to use through appropriate means.
- Inspect facilities prior to occupation and document conditions and preexisting damage.
- Determine requirements for each facility, including the ICP.
- Prepare layouts of incident facilities.
- Notify Unit Leaders of facility layout.
- Activate incident facilities.
- Provide Facility Managers and personnel to operate facilities.
- Provide sleeping facilities.
- Provide security services.
- Provide food and water service.
- Provide sanitation and shower service.
- Provide facility maintenance services (*e.g.*, sanitation, lighting, clean up, and trash removal).
- Inspect all facilities for damage and potential claims.
- Demobilize incident facilities.
- Maintain facility records.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

GROUND SUPPORT UNIT LEADER (GSUL)

The Ground Support Unit Leader (GSUL) is primarily responsible for management of tactical equipment, vehicles, mobile ground support equipment and fueling services; transportation of personnel, supplies, food and equipment in support of incident operations; and implementing the Traffic Plan for the incident.

The major responsibilities of the GSUL are:

- Review Common Responsibilities.
- Participate in Support Branch/Logistics Section planning activities.
- Develop and implement the Traffic Plan in coordination with the Environmental Unit Leader (ENVL).
- Support out-of-service resources.
- Notify the Resources Unit of all status changes on support and transportation vehicles.
- Arrange for and activate fueling, maintenance, and repair of ground resources.
- Maintain the Support Vehicle Inventory (ICS 218).
- Provide transportation services.
- Collect information on use of rented equipment.
- Requisition maintenance and repair supplies (*e.g.*, fuel and spare parts).
- Maintain incident roads.
- Ensure vehicles are decontaminated prior to demobilization.
- Submit reports to SUBD as directed.
- Maintain Unit Log (ICS 214-CG) and forward to the Documentation Unit Leader (DOCL) for disposition.

VESSEL SUPPORT UNIT LEADER (VSUL)

The Vessel Support Unit Leader (VSUL) is responsible for implementing the Vessel Routing Plan for the incident and coordinating transportation on the water and between shore resources. Since most vessels will be supported by their own infrastructure, the Vessel Support Unit may be requested to arrange fueling, dockage, maintenance, and repair of vessels on a case-by-case basis.

The major responsibilities of the VSUL are:

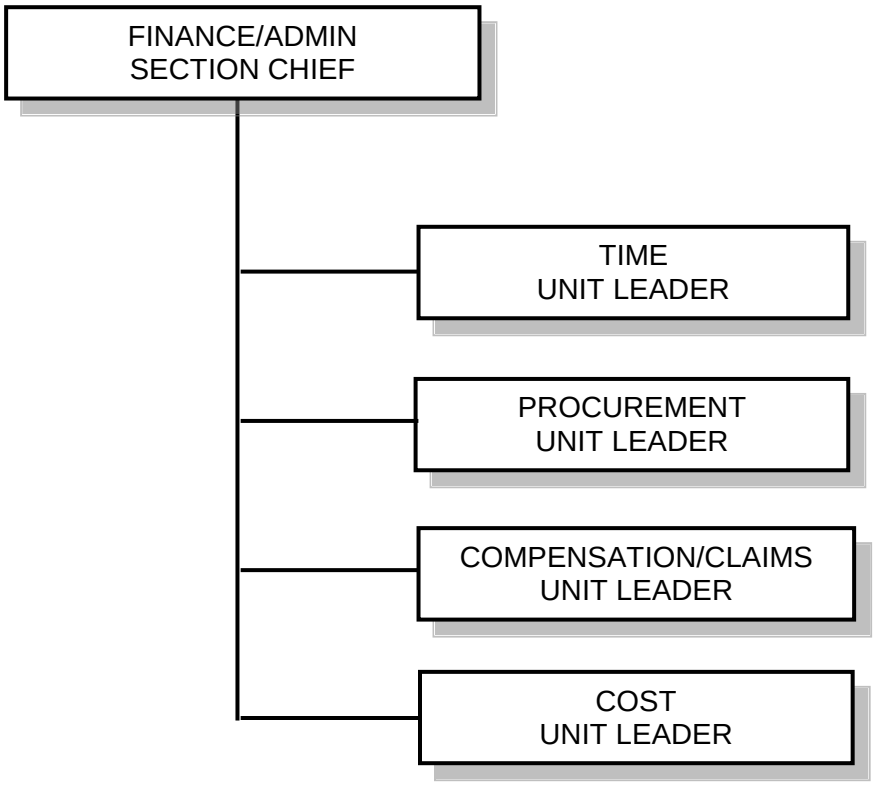
- Review Common Responsibilities.
- Obtain a briefing from the SUBD or the LSC.
- Participate in Support Branch/Logistics Section planning activities.
- Coordinate development of the Vessel Routing Plan in coordination with the Environmental Unit Leader (ENVL).
- Coordinate vessel transportation assignments with the Protection and Recovery Branch or other sources of vessel transportation.
- Coordinate water-to-land transportation with the Ground Support Unit, as necessary.
- Maintain a prioritized list of transportation requirements that need to be scheduled with the transportation source.
- Support out-of-service vessel resources, as requested.
- Arrange for fueling, dockage, maintenance, and repair of vessel resources, as requested.
- Maintain the Support Vehicle Inventory (ICS 218).
- Ensure vessels are decontaminated prior to demobilization.
- Submit reports to SUBD as directed.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

SECURITY MANAGER (SECM)

The Security Manager (SECM) is responsible for providing safeguards needed to protect personnel and property from loss or damage. The SECM reports to the FACL.
The major responsibilities of the SECM are:

- Review Common Responsibilities.
- Establish contacts with local law enforcement, as required.
- Ensure facility and personnel security requirements are met.
- Develop Security Plan for incident facilities.
- Request required personnel support to accomplish work assignments.
- Ensure security of sensitive material and systems.
- Ensure that support personnel are qualified to manage security problems.
- Adjust Security Plan for personnel and equipment changes and releases.
- Coordinate security activities with appropriate incident personnel.
- Keep the peace, prevent assaults, and settle disputes.
- Prevent theft of all Company and personal property.
- Document all complaints and suspicious occurrences.
- Maintain Unit Log (ICS 214-CG) and forward to the Documentation Unit Leader (DOCL) for disposition.

FINANCE/ADMINISTRATION



FINANCE/ADMINISTRATION SECTION CHIEF (FSC)

The Finance/Admin Section Chief (FSC) is a member of the General Staff and responsible for all financial, administrative, and cost analysis aspects of the incident and supervising members of the Finance/Admin Section.

The FSC may have Deputy FSCs. The Deputy FSC must have the same qualifications as FSC as they must be ready to take over that position at any time.

The major responsibilities of the FSC are:

- Review Common Responsibilities.
- Participate in incident planning meetings and briefings as required.
- Review operational plans and provide alternatives where financially appropriate.
- Manage all financial aspects of an incident.
- Identify all funding sources and ceilings for the response operation.
- Provide financial and cost analysis information, as requested.
- Gather pertinent information from briefings with responsible agencies.
- Develop an operating plan for the Finance/Admin Section.
- Fill supply and support needs.
- Meet with Assisting and Cooperating Agency Representatives (AREPs), as needed.
- Maintain daily contact with each organization's administrative headquarters on Finance/Admin matters.
- Coordinate with the Resource Unit Leader (RESL) to ensure that all personnel time records are accurately completed.
- Provide financial and administrative input to demobilization planning.
- Ensure that all funding obligation documents initiated at the incident are properly prepared and completed.
- Brief organization administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
- Develop recommended list of Section resources to be demobilized and initial recommendation for release when appropriate.
- Receive and implement applicable portions of the incident Demobilization Plan.

FINANCE/ADMINISTRATION SECTION CHIEF (FSC) (Cont'd)

- Participate in Business Management Meeting with the Logistics Section Chief (LSC).
- Actively manage incident funds, differentiating between the various funding sources used to carry out response activities.
- Ensure that financial recording software is open and access to the accounting line is established for the incident.
- Ensure that obligations are entered in financial recording software.
- Conduct Finance Section status meetings as required.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

TIME UNIT LEADER (TIME)

The Time Unit Leader (TIME) is responsible for equipment and personnel time recording and for managing the commissary operations.

The major responsibilities of the TIME are:

- Review Common Responsibilities.
- Determine incident requirements for time recording function.
- Determine resource needs.
- Contact appropriate organization personnel or Agency Representative (AREP) regarding organization-specific time recording requirements.
- Ensure that daily personnel time recording documents are prepared and in compliance with each organizations policy.
- Maintain separate logs for overtime hours.
- Submit cost estimate data forms to the Cost Unit Leader (COST), as required.
- Maintain records security.
- Ensure that all records are current and complete prior to demobilization.
- Release time reports from assisting organization personnel to the respective AREPs prior to demobilization.
- Develop and implement procedures to protect Personally Identifiable Information (PII).
- Brief the FSC on current problems and recommendations, outstanding issues, and follow-up requirements.
- Coordinate with Resource Unit Leader (RESL) to obtain copies of all check in/check out records each day.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

PROCUREMENT UNIT LEADER (PROC)

The Procurement Unit Leader (PROC) is responsible for administering all financial matters pertaining to vendor contracts, leases, and fiscal agreements.

Although the PROC works within the SMT in support of the IC/UC, specific procurement policies, authorities, and procedures, which include emergency authorization procedures to expedite purchases, cannot be circumvented by the IC/UC.

The major responsibilities of the PROC are:

- Review Common Responsibilities.
- Review incident needs and any special procedures with Unit Leaders, as needed.
- Coordinate with local jurisdiction on plans and supply sources.
- Obtain the Incident Procurement Plan.
- Prepare and authorize contracts, building, and land-use agreements.
- Draft memoranda of understanding (MOUs) as necessary.
- Establish contracts and agreements with supply vendors.
- Provide for coordination between the Property Management Unit Leader (PROP) and all procurement organizations supporting the incident.
- Ensure that a system is in place that meets organization property management requirements.
- Ensure proper accounting for all new property.
- Interpret contracts and agreements to resolve disputes within delegated authority.
- Coordinate with the Compensation/Claims Unit for processing claims.
- Coordinate with the SPUL and COST to ensure all obligations are entered in financial recording software and all costs are reconciled prior to demobilization.
- Coordinate with the SPUL to ensure all orders and purchases are screened for possible accountable/reportable property.
- Complete final processing of contracts and send documents for payment.
- Coordinate cost data in contracts with the COST.
- Brief the FSC on current problems and recommendations, outstanding issues, and follow-up requirements.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

COMPENSATION/CLAIMS UNIT LEADER (COMP)

The COMP is responsible for the overall management and direction of all administrative matters pertaining to compensation for injury and claims related activities (other than injury) for an incident.

The major responsibilities of the COMP are:

- Review Common Responsibilities.
- Obtain a briefing from the FSC.
- Establish contact with the incident Medical unit Leader (MEDL), Safety Officer (SOFR) and Liaison Officer (LOFR).
- Determine the need for Compensation for Injury Specialists (INJRs), and Claims Specialists (CLMS), and order personnel as needed.
- Establish a compensation for injury work area within or as close as possible to the Medical Unit.
- Review the Medical Plan (ICS 206).
- Review and coordinate procedures for handling claims with the Procurement Unit.
- Brief the CLMS on incident activity.
- Periodically review logs and forms produced by the CLMS to ensure that they are complete, entries are timely and accurate, and that they are in compliance with organization requirements and policies.
- Ensure that all Compensation for Injury and Claims logs and forms are complete and routed to the appropriate agency for post-incident processing prior to demobilization.
- Keep the FSC briefed on Compensation/Claims Unit status and activity.
- Demobilize unit in accordance with the Incident Demobilization Plan.
- Maintain Unit Log (ICS 214) and forward to the Documentation Unit Leader (DOCL) for disposition.

COST UNIT LEADER (COST)

The Cost Unit Leader (COST) is responsible for collecting all cost data, performing cost effectiveness analyses, and providing cost estimates and cost saving recommendations for the incident.

The major responsibilities of the COST are:

- Review Common Responsibilities.
- Obtain a briefing from the FSC.
- Coordinate with organization's headquarters on cost reporting procedures.
- Collect and record all cost data.
- Develop incident cost summaries.
- Prepare resources-use cost estimates for the Planning Section.
- Make cost saving recommendations to the FSC.
- Ensure all cost documents are accurately prepared.
- Maintain cumulative incident cost records.
- Ensure cost documentation captures all costs associated with the incident.
- Coordinate with TIME to ensure all personnel and equipment costs are captured.
- Coordinate with the PROC and SPUL to ensure all obligations are entered in financial recording software.
- Complete account reconciliations as required by current Company financial policy.
- Complete all records prior to demobilization.
- Provide reports to the FSC.
- Maintain Unit Log (ICS 214-CG) and forward to the Documentation Unit Leader (DOCL) for disposition.

ADMINISTRATION UNIT LEADER (ADMN)

The Administration unit Leader (ADMN) is responsible for all administrative personnel issues at a response.

The major responsibilities of the ADMN are:

- Review Common Responsibilities.
- Set up Administration Unit.
- Ensure Administration Unit supports all organization personnel assigned to the SMT.
- Request Administration Unit resources.
- Organize Administration Unit work force.
- Implement use of all necessary personnel management software tools.
- Ensure personnel assignment and organization travel orders are accurate.
- Provide pay and travel support to personnel.
- Ensure reporting personnel meet organization requirements for assignment to the SMT.
- Validate travel orders for all assigned civilian and military personnel.
- Validate time cards for all civilian personnel.
- Establish other organization points of contact (POCs) for non-Company personnel working at incident if not included in the Unit staff.
- Ensure eligible personnel know how to document overtime according to organization policy.
- Process overtime paperwork for appropriate organization signature prior to demobilization from incident.
- Provide advice and recommendations on personnel matters.
- Manage administrative databases and spreadsheets used for analyses and decision making.
- Review, analyze, and provide advice on human resource management issues.
- Ensure compliance with Privacy Act requirements to maintain the confidentiality of personnel documents.
- Maintain Unit Log (ICS 214-CG) and forward to the Documentation Unit Leader (DOCL) for disposition.

PROPERTY MANAGEMENT UNIT LEADER (PROP)

The Property Management Unit Leader (PROP) is responsible for all accountable property procured during a response.

The major responsibilities of the PROP are:

- Review Common Responsibilities.
- Set up property management unit.
- Request Property Management Unit resources.
- Organize Property Management Unit work force.
- Adhere to guidance provided in Company policies.
- Coordinate with the SPUL and PROC to ensure all orders and purchases are screened to identify accountable or reportable property items that would need to be entered into the appropriate organization property tracking software (*i.e.*, Oracle Financial).
- Designate a Property Administrator responsible for entries into property tracking software.
- Ensure documentation is maintained on recorded property to include, but not limited to the Resource Request Message (ICS 213-RR) and invoice.
- Record location of accountable property and complete a physical inventory (including a joint inventory when transferring property to another Property Custodian).
- Depending on the size of the area affected by the incident, designate Property Custodians to ensure logistical control and accountability over the disbursed property.
- Ensure individuals responsible to maintain and monitor the item signs a Custody Receipt for Personal Property Pass (DHS 560-1) or the ICS-219-9A.
- Ensure all property assigned to the incident is appropriately marked and identifies ownership.
- Ensure property assigned to the incident is transferred back to or disposed of in accordance with owning organization regulations or funding source requirements.
- Establish procedures for the use of property passes for accountable and non-accountable property required for field operations.
- Designate custodial areas and property custodians in writing.
- Ensure reportable and/or accountable property is reviewed by the organization that provided the funding before action for disposal is taken.
- Ensure all property documents are available to the organization responsible for reimbursement billing.
- Maintain Unit Log (ICS 214-CG) and forward to the Documentation Unit Leader (DOCL) for disposition.

FACILITY RESPONSE EQUIPMENT[1]

Date of Last Inspection:	**Last Inspection or Response Equipment Test Date:**
Inspection By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Inspected By:	

FIRE FIGHTING AND PERSONNEL PROTECTIVE EQUIPMENT

Type/Year	Operational Status	Shelf Life	Quantity	Storage Location(s)
1500 GPM Foam Pumper w/1000 Gal Foam			1	Fire Station
5” Fire Hose			4,000’	Engines 1 & 3, Fire Station
6" Fire Hose			1,000’	Engine 3
3” Fire Hose			3,000’	Fire Station
1.75” Fire Hose			1,000’	Fire Station
3500 Watt Generator			1	Engine 3
500 Watt Extend-A-Lite			1	Engines 1 & 3
270 Gal. Foam Totes with Foam Nozzles			10	Located throughout refinery
SCBA			40	Located throughout refinery
Supplied Light and Air Truck			1	Fire Station
SCBA			40	Supplied Light and Air Truck
SCBA Compressor			2	Supplied Light and Air Truck and Fire Station
Generator with Scene Lights			1	Supplied Light and Air Truck
Set of Technical Rescue Equipment			1	Supplied Light and Air Truck
Helicopter Flares for Landing			1	Engines 1 & 3
750 GPM Portable Wheeled Monitors			10	Located throughout the refinery
Command Vehicle			1	Safety Dept.
Quick Attack Trucks with 100 Gal. of Foam			2	In Plant
Level “A” Encapsulated Suits			30	Fire House
Portable Fire Extinguishers			>450	Located throughout refinery
Response Pick-Ups			3	HSE Dept.
Basic Life Support First Aid Kits			3	(1) Medical Department, (1) Safety Vehicle, (1) Security Vehicle
Automatic Defibrillators			24	(1) Medical Department, (1) Safety Vehicle, (1) Security Vehicle
3000 GPM Fire Truck with 1000 Gal. Foam			1	Fire Station
4000 GPM Portable Fire Pump			1	Dock
Kolda Pump Modules 1500 GPM			4	Storage
Kolda Mobile Hose Reel Trailers			3 3000’ – 6” Fire Hose Ea.	Storage

1. All facility equipment is tested/inspected on a routine basis and maintained in good operational status. After use, all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed. Equipment listed with no shelf life or N/A do not have a shelf life indicated by manufacturer.

FACILITY RESPONSE EQUIPMENT[1] (Cont'd)

Date of Last Update:

Inspected By:

SKIMMERS/PUMPS

Type/Model/Year	Operational Status	Quantity	Capacity gal./min.	Daily Effective Recovery Rate	Storage Location(s)	Date Fuel Last Changed
Pneumatic Drum Skimmers / and Compressors / Crucial		2	18" 35 gpm		PRSI Storage	
Diesel Disc Skimmer / Crucial ORD 48"		1	90 gpm		PRSI Storage	
Diaphragm Pumps / Yanmar L48V 3"		2	80 gpm		PRSI Storage	

BOOM[1]

Type/Model/ Year	Operational Status	Shelf Life	Number	Skirt Size	Size (Length)	Containment Area	Storage Location(s)
Jaton 2010				18" skirt	1,500 ft.		Dock
ACME 2012				18" skirt	1,000 ft.		Storage New
Various				8"	20 Bales		Trailer

CHEMICAL DISPERSANTS

Type	Operational Status	Shelf Life	Amt.	Date Purchased	Treatment Capacity	Storage Location(s)	Date Fuel Last Changed
			NONE				

DISPERSANT DISPENSING EQUIPMENT

Type/Year	Operational Status	Shelf Life	Capacity	Storage Location(s)	Response Time
		NONE			

SORBENTS

Type/Year Purchased	Operational Status	Shelf Life	Amount	Absorption Capacity gal.	Storage Location(s)
Various			20 Bales 18" x 18"		Trailer

* Equipment listed with no shelf life or N/A do not have a shelf life indicated by manufacturer.

1 All facility equipment is tested/inspected on a routine basis and maintained in good operational status. After use, all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

FACILITY RESPONSE EQUIPMENT[1] (Cont'd)

Date of Last Inspection:	**Last Inspection or Response Equipment Test Date:**
Inspection By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Inspected By:	

HAND TOOLS

Type/Year	Operational Status	Quantity	Storage Location(s)
	NONE		

COMMUNICATION EQUIPMENT

Type/Year	Operational Status	Quantity	Storage Location(s)/Number
Radios / XPR6550		4	Response Trailer
Marine Radios / VHF		2	Response Trailer
Mototubo Digital Radio System / XPR 6550		150	Facility Wide
Cellular / T-Mobile		120	Facility Personnel
Cellular / Cell Phone		3	Security
Various Beepers		10	Response Personnel

OTHER EQUIPMENT

Type/Year	Operational Status	Quantity	Storage Location(s)
Open Top Trailer / Top-Hat 2007		1	Dock
Open Top Trailer / 2012		2	Storage
Custom Response Trailer 28' / Super Coach 2012		1	PRSI Storage
Life Jackets / MD3087 Auto inflate		15	PRSI Storage

* Equipment listed with no shelf life or N/A do not have a shelf life indicated by manufacturer.

1 All facility equipment is tested/inspected on a routine basis and maintained in good operational status. After use, all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

FACILITY RESPONSE EQUIPMENT[1] (Cont'd)	
Date of Last Inspection:	**Last Inspection or Response Equipment Test Date:**
Inspection By:	**Last Deployment Drill Date:**
Inspection Frequency:	**Deployment Frequency:**
Inspected By:	

BOATS & MOTORS				
Type/Year	**Operational Status**	**Shelf Life**	**Quantity**	**Storage Location(s)**
Boat Motor (40 HP) / Evinrude			1	PRSI Storage
Aluminum flat bottom boat/trailer 18' / 2012			1	PRSI Storage

* Equipment listed with no shelf life or N/A do not have a shelf life indicated by manufacturer.

Booming strategies are depicted on the TGLO maps provided in Section 6.

The Facility, in addition to the above response equipment, also maintains spill kits for day-to-day operational and maintenance activities. Generally, these EVERY DAY spill kits contain oil sorbent pads, sorbent pillows, sorbent booms, gloves, goggles, and waste bags.

The Facility has no additional response equipment or other cleanup materials than listed in this Appendix.

1 All facility equipment is tested/inspected on a routine basis and maintained in good operational status. After use, all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

FIGURE 5.1

EXTERNAL RESPONSE RESOURCES

Houston Captain of the Port (COTP) Zone

USCG Classified Oil Spill Removal Organization (OSRO)								
OSRO Name	Contract Number	Actual Response Time	Environment Type	Facility Classification Level				High Volume Port
				MM	W [1]	W [2]	W [3]	
OMI Environmental Solutions	PO 059807	2 hours	River/Canal	X	X	X	X	Yes
			Inland	X	X	X	X	
Horizon Environmental	PO 059591	2 hours	River/Canal	X	X	X		Yes
			Inland	X				
Clean Channel Association	Member	5 hours	River/Canal	X	X	X	X	Yes
			Inland	X	X	X	X	

Note: Classification ratings taken from the USCG's internet site https://cgrri.uscg.mil/UserReports/WebClassificationReport.aspx. Evidence of contracts/membership agreements are provided in Appendix C and telephone numbers are provided in Figure 2.5.

The AMPD coverage is provided by Facility owned spill response equipment.

HORIZON ENVIRONMENTAL

Houston COTP Zone

STANDARD TERMS AND CONDITIONS FOR

GENERAL SERVICES

BETWEEN

PASADENA REFINING SYSTEM, INC.

and

ANDERSON POLLUTION CONTROL,INC.(dba HORIZONTAL ENVIRONMENTAL)

for

Oil Spill Response

January 14, 2015

STANDARD TERMS AND CONDITIONS FOR GENERAL SERVICES

These Standard Terms and Conditions for General Services (this "Contract/Agreement"), dated and effective as of the 14th day of January, 2015, ("Effective Date") entered into by and between Pasadena Refining System, Inc., a Connecticut corporation, with its principal place of business located at 111 Red Bluff Rd., Pasadena, Texas 77506 (hereafter referred to as "PRSI") and Anderson Pollution Control, Inc.(dba Horizontal Environmental), a Texas corporation with its principal place of business located at 2407 Albright Dr.,Houston, Texas 77017 (hereafter referred to as "Contractor/Supplier"), each sometimes referred to as a "Party" and collectively as the "Parties".

Whereas, from time to time, PRSI may desire to obtain Services/Goods provided by Contractor (as defined below) and Contractor may be willing to provide those Services/Goods in the manner and type agreed to by the Parties and for the price/consideration agreed to by the Parties; and

Whereas, the Parties wish to agree on the terms and conditions relating to providing such Services/Goods;

NOW, THEREFORE, in consideration of the mutual promises, covenants, warranties, and agreements set forth below, the Parties agree as follows:

GENERAL PRINCIPLES

Objective of the Agreement:	Pollution Control
Scope of the Agreement:	Oil Spill Response or as further specified in **Exhibit "A".**
Total Contract Value:	The estimated maximum aggregated value of this Contract is $100,000.00 (USD One Hundred Thousand Dollars and 00/100). However, PRSI is not obliged to consume any or all of such estimated amount. PRSI is only obligated to pay for the portion of the Work that has been completed successfully in accordance with the terms, conditions and specifications of this Contract as per the rates detailed in Exhibit A.
Duration of the Service Contract:	The term of this Contract shall commence on the Effective Date and shall remain in full force and effect for a term of three (3) years or until the maximum service Contract value is reached, whichever comes first, and may be extended upon mutual agreement between the parties.

DEFINITIONS

The following terms shall have the meaning set forth below. Other defined terms in this Contract shall have the meaning set forth elsewhere in this Contract.

IN WITNESS WHEROF, the parties hereto have executed this Contract as of the 14th day of January, 2015.

SIGNED AND ACCEPTED

Pasadena Refining System, Inc.

By: Mark Berlinger

Name: Director of HSE

Title: PRSI

Date: 1/15/15

SIGNED AND ACCEPTED

Anderson Pollution Control, Inc.(dba Horizontal Environmental)

By:

Name: Tommy Anderson

Title: CEO

Date: 1/14/15

WITNESSED BY:

Name: Harry Thomas
Buyer

WITNESSED BY:

Name: Courtney Guy

OMI ENVIRONMENTAL SOLUTIONS

Houston COTP Zone

STANDARD TERMS AND CONDITIONS FOR

GENERAL SERVICES

BETWEEN

PASADENA REFINING SYSTEM, INC.

and

OMI ENVIRONMENTAL SOLUTIONS

for

Oil Spill Response

January 26, 2015

STANDARD TERMS AND CONDITIONS FOR GENERAL SERVICES

These Standard Terms and Conditions for General Services (this "Contract/Agreement"), dated and effective as of the 26th day of January, 2015, ("Effective Date") entered into by and between Pasadena Refining System, Inc., a Connecticut corporation, with its principal place of business located at 111 Red Bluff Rd., Pasadena, Texas 77506 (hereafter referred to as "PRSI") and OMI Environmental Solutions, a Lousiana corporation with its principal place of business located at 131 Keating Drive, Belle Chasse, LA 70037 (hereafter referred to as "Contractor/Supplier"), each sometimes referred to as a "Party" and collectively as the "Parties".

Whereas, from time to time, PRSI may desire to obtain Services/Goods provided by Contractor (as defined below) and Contractor may be willing to provide those Services/Goods in the manner and type agreed to by the Parties and for the price/consideration agreed to by the Parties; and

Whereas, the Parties wish to agree on the terms and conditions relating to providing such Services/Goods;

NOW, THEREFORE, in consideration of the mutual promises, covenants, warranties, and agreements set forth below, the Parties agree as follows:

GENERAL PRINCIPLES

Objective of the Agreement:	Environmental Recovery
Scope of the Agreement:	Oil Spill Response or as further specified in **Exhibit "A".**
Total Contract Value:	The estimated maximum aggregated value of this Contract is $100,000.00 (USD One Hundred Thousand Dollars and 00/100. However, PRSI is not obliged to consume any or all of such estimated amount. PRSI is only obligated to pay for the portion of the Work that has been completed successfully in accordance with the terms, conditions and specifications of this Contract as per the rates detailed in Exhibit A.
Duration of the Service Contract:	The term of this Contract shall commence on the Effective Date and shall remain in full force and effect for a term of three (3) years or until the maximum service Contract value is reached, whichever comes first, and may be extended upon mutual agreement between the parties.

DEFINITIONS

The following terms shall have the meaning set forth below. Other defined terms in this Contract shall have the meaning set forth elsewhere in this Contract.

IN WITNESS WHEROF, the parties hereto have executed this Contract as of the 26th day of January, 2015.

SIGNED AND ACCEPTED

Pasadena Refining System, Inc.

By: Mark Berlinger

Name: Director of HSE

Title: PRSI

Date: 1-29-15

SIGNED AND ACCEPTED

Oil Mop Environmental Solutions

By: Roxann Baudean

Name: Roxann Baudean

Title: Contract Administrator

Date: January 27, 2015

WITNESSED BY:

Name: ~~Harry Thomas~~

Buyer

WITNESSED BY:

Name:

CLEAN CHANNEL ASSOCIATION

Houston COTP Zone

CLEAN CHANNEL ASSOCIATION

January 4, 2016

Ms. Alisa White
Pasadena Refining

Dear Alisa:

This is to confirm that Pasadena Refining is a member in good standing of Clean Channel Association, Inc. (CCA), an oil spill response cooperative. CCA maintains the highest classification as an oil spill removal organization (OSRO): MM/W1-W3, River/Canal/Inland, for Facilities and Vessels in Houston and Port Arthur COTP zones, and is a Texas General Land Office certified Discharge Cleanup Organization.

CCA will respond to Pasadena Refining's worst case spill, if requested by an authorized member representative.

CCA's spill response equipment is maintained and tested on a routine basis in accordance with manufacturers' suggestions and our self-established preventative maintenance schedule. CCA has also developed aerial surveillance capabilities through the use of a drone.

In addition to the maintenance program, CCA conducts drills designed to meet OSRO PREP requirements. Last year we responded to two member emergencies and participated in 12 equipment deployments/SMT table-top drills.

Finally, the larger CCA vessels hold Certificates of Inspection, which subject the vessels to periodic U. S. Coast Guard inspection.

Sincerely,

S. P. Glenn
President

Encl: Clean Channel Assn. Equipment List
USCG OSRO List
TGLO DCO

3110 Pasadena Freeway Pasadena, Texas 77503 Phone: (713) 534-6195 Fax: (713) 534-6197

CLEAN CHANNEL ASSOCIATION EQUIPMENT

A. Equipment located at CCA/Pasadena office/warehouse

1. Trailer containing 1700 feet of 18" oil spill containment boom with related equipment including, without limitation, tow bridals and anchors
2. Two 18' outboard powered workboats
3. Three each three-inch diesel driven portable pumps with portable hoses
4. Two each two-inch diesel driven portable pumps with hoses
5. One 24' decontamination trailer, supplies for 100 showers, and cleaning materials
6. One Pharos Marine GT-185 skimming system with hydraulic power pack
7. One Gastech LEL/OXY/H_2S meter
8. 2,000 feet of 8" oil spill containment boom
9. Five portable weir skimmers (Douglas 18000)
10. Two portable weir skimmers (Crucial ALWEIR 3")
11. One ABASCO model SSK8 weir skimmer)
12. Sludgemaster Pump for heavy oils (300 gpm)
13. 40' shipping container
14. One LORI skimming system mounted on a 26' vessel with 20 bbls storage.
15. One JBF DIP 402 Skimmer Vessel
16. One DJI Phantom Drone with 4K camera and gyro/GPS stabilizer

B. One 40' shipping container located at Dow Chemical Co., Freeport, Texas equipped with the following

1. 500 feet of 36" oil spill containment boom with related equipment including, without limitation, tow bridals and anchors and line
2. 1,500 feet of 24" oil spill containment boom
3. One each three-inch diesel driven portable pump with portable hoses
4. One portable wier skimmer (Douglas 18000)
5. One 2,100 gal. Fastank portable storage container

C. The following equipment is owned by Clean Channel Association and normally stored on board vessels *Clean Channel 2* and *Clean Channel 3*:

1. 1,000 feet of 18" oil spill containment boom (each skimmer barge)
2. One portable wier skimmer (Douglas 18000) with hoses (each skimmer barge)

D. One 20' trailer located at T&T Marine Salvage, Galveston, Texas, containing 1,000 feet of 18" oil spill containment boom.

E. One LORI skimming system mounted on a 24' vessel with 50 bbls storage located in Freeport, Texas.

F. One JBF DIP 402 Skimmer Vessel located at Shell Oil Deer Park Refinery.

CLEAN CHANNEL ASSOCIATION, INC.
LEASED EQUIPMENT

Clean Channel 2 and *Clean Channel 3* -
Two (2) recovery barges 30' x 120' with 1,500 bbl capacity with oil recovery system and related equipment including:

1. built-in weir skimming system
2. cargo pump 4", electric driven
3. trash pump 3",. electric driven, 3 each
4. 100kw diesel powered generator
5. three (3) 2" double diaphragm air pumps
6. two Elastec Model 136 two-drum skimmers

COTP Zone:
Houston - DISTRICT 8 - ***High Volume Port***

OSRO Name:								
Clean Channel Association - OSRO Number: 11								
Operating Environment	**Facility MMPD**	**Facility WCD1**	**Facility WCD2**	**Facility WCD3**	**Vessel MMPD**	**Vessel WCD1**	**Vessel WCD2**	**Vessel WCD3**
Inland	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
River or Canal	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

COTP Zone:
Port Arthur - DISTRICT 8 - ***High Volume Port***

OSRO Name:								
Clean Channel Association - OSRO Number: 11								
Operating Environment	**Facility MMPD**	**Facility WCD1**	**Facility WCD2**	**Facility WCD3**	**Vessel MMPD**	**Vessel WCD1**	**Vessel WCD2**	**Vessel WCD3**
Inland	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
River or Canal	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Date: February 21, 2015 **DCO # 504**

Discharge Cleanup Organization Certificate

Clean Channel Association

Pasadena, Texas

This certificate carries with it the need to maintain a high level of response preparedness, to respond in a timely, professional manner, and to notify the Texas General Land Office of any change in the Holder's ability to accomplish this mission. Certification is for three years from the above date.

Commissioner
Texas General Land Office

Director
Oil Spill Prevention and Response

EVACUATION PLAN

Evacuation Procedures

In case of an emergency within the Facility that would necessitate evacuation, some or all of the following steps are taken, depending on type of emergency and circumstances:

- Give verbal alarm (via radio or whatever means necessary).
- Call Security Control for internal/external notifications.
- Shut down loading, unloading, pipeline, and marine operations.
- Turn off all vehicles and evacuate upwind to nearest rally point.
- Evacuate trucks from facility (provided that a safe operating environment exists).
- Divert incoming trucks/vessels to a safe distance away from the Facility.
- Evacuate all personnel to the Rally Point (see diagram).
- Consider prevailing wind directions and speed, as well as water current and tidal conditions because certain conditions may eliminate the use of specific evacuation routes and/or muster points.

Location of Alarm / Notification System

All internal systems/signals are clearly understood by all personnel, checked and practiced frequently, and the communications equipment is maintained in “intrinsically safe” condition.

Security Control operates the refinery Emergency Notification System (ENS). When an emergency is called in to Security Control the ENS is activated and detailed alert information will broadcast to the facility. If the ENS is inoperable, the nitrogen evacuation alarm is the emergency backup.

Area wide alarms do not exist at this Facility. Evacuation of the surrounding community would be the responsibility of the City of Pasadena/Local Emergency Planning Committee (LEPC).

Evacuation Response

The decision to evacuate the facility will be made by the incident commander, plant manager, or assistant incident commander and announced via handheld radios or Facility PA system.

Additionally, all employees that work out in the plant have access to an intrinsically safe two -way radio for emergency alarm/notification communication equipment. Additional radios are available for contractors and nonplant employees. The facility has provided for local, state, and federal communication of potential hazards.

Community Evacuation Plan

Any community evacuation will be coordinated by the local fire and police departments. Contacts for local responders are identified in Figure 2.5 on the Fire, Police, Hospitals, and the LEPC, are provided on the Required Notifications table. Local government maintains their own community evacuation plans.

Evacuation Routes / Alternative Routes of Evacuation / Centralized Check-In Areas

Evacuation diagrams are posted throughout the refinery, tank farm, and at the dock, showing evacuation routes from different areas of the Facility. These routes are as follows:

Refinery Area

Primary Route – safest route to the nearest rally point (North, South, East or West)

Dock Area

Primary Route – safest route to the nearest rally point

Evacuation points have also been established for each area. These points are as follows:

North – Old Fab Yard – west of Tank 353

South – Administration Building Parking Lot – Gate #7

East – Gate #13

West – Warehouse Yard at Gate #2

A roll call would be taken to account for all personnel.

RBTF

Main Access Gate

Operations

All Non Emergency Response Team Operating Personnel will remain in assigned areas and safely operate critical equipment unless instructed otherwise by IC or Operations Supervision.

Arrival Routes

Arrival routes of emergency response personnel and response equipment and transportation routes of injured personnel would be via Washburn Tunnel Service Road, Old Crown Road, North Witter Road and Red Bluff Road.

On-Site Shelter

Shelter locations at the Facility consist within the following structures:

- Reformer #3 Alkylation Control Room
- Planning Building
- Administration Building
- Lab
- Maintenance Building Offices
- Operations Building
- Refinery Control Center

Mitigation Command Center

The primary Emergency Operation Center (EOC) is located in the Pasadena Refining Administration Building on the second floor.

Water Currents, Tides, Wave Conditions

The Houston Ship Channel area typically experiences two (2) high tides and two (2) low tides on a daily (24 hour) cycle. The mean tidal range is approximately 1.65 feet with a high level of 1.42 feet although higher water levels up to 3.0 feet may be present during floods. Tidal currents range from approximately 0.74 knots during maximum ebb conditions to approximately 0.47 knots during maximum flood although higher currents up to 2.1 knots may be present during floods. The Houston Ship Channel area represents a sheltered environment.

Prevailing Winds

Prevailing winds in Houston are typically out of the southeast throughout the year. Cold fronts will change the prevailing wind to the northwest. Depending on the cold front strength and speed, strong winds can occur 2 to 3 days in advance and last 1 to 2 days after.

Hazard of Spilled Materials

Evacuation routes will also be determined based on the hazards imposed by a spilled material; for instance, if a spill were flowing in the direction of an ignition source (fire hazard), the evacuation route would be selected in an opposite direction. Refer to the Tank Table in the SPCC plan for hazards posed on site, in addition to those listed on the Facility Diagrams; SDSs are maintained on site for product specific considerations.

Location of Stored Materials and Spill Flow Direction

The Facility stores a number of chemicals and petroleum products. For purposes of the ICP, the below represents a list of normally stored materials; refer to the Drainage Diagram for predicted spill flow directions as applicable to this plan.

Products Handled:

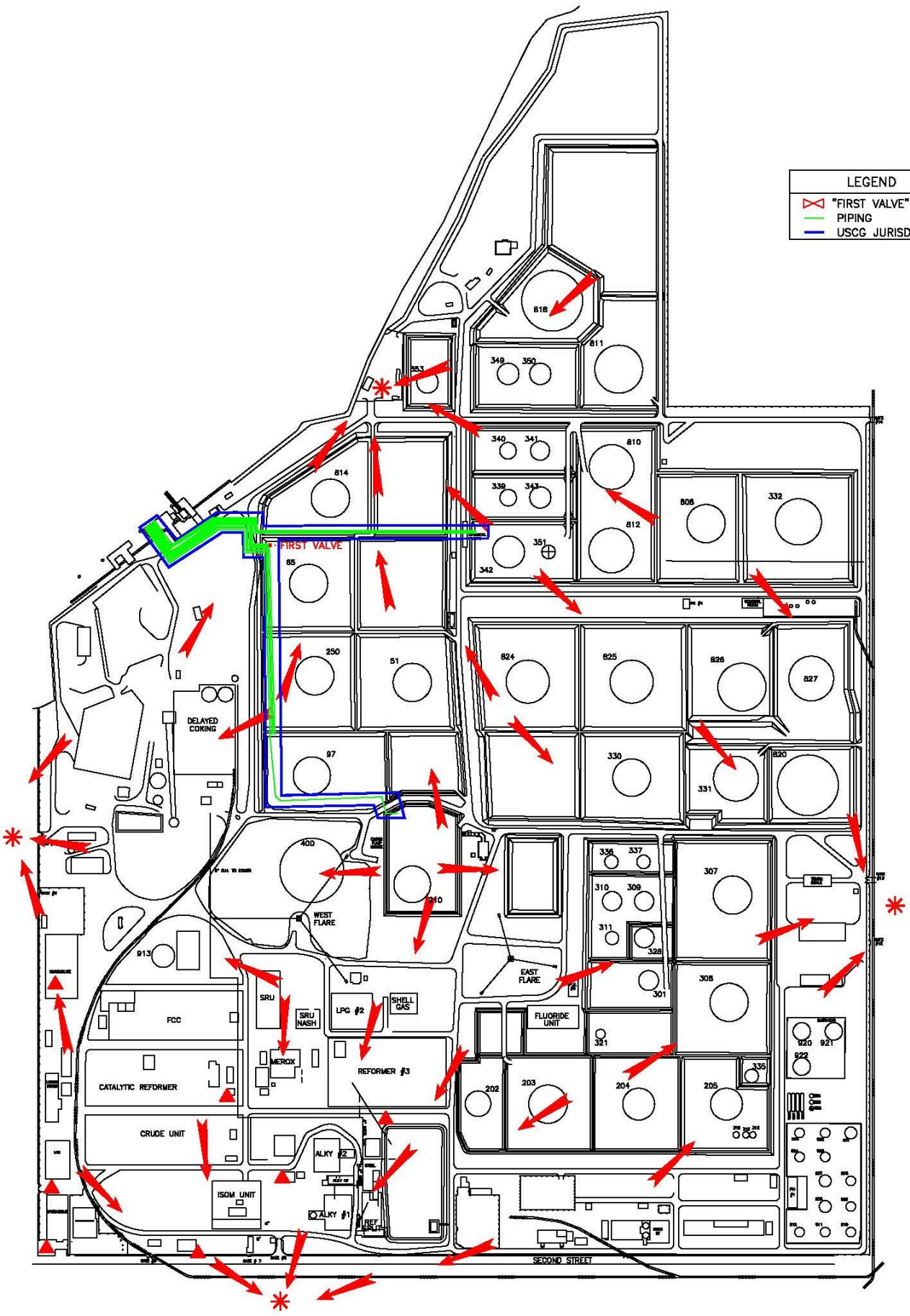
Crude Oil	Benzene Extract	Naphtha
Gasoline	Spent Caustic	Propane/Propylene Mix
Kerosene	Propane	Normal Butane
Isobutane	Heavy Oil/Slurry/Fuel Oil	Butane/Butylene Mix
Diesel	Jet Fuel	Gas Oil

Transportation of Injured Personnel

Head west on Red Bluff for – 43 feet
At the traffic circle, take the 3rd exit onto N Shaver Street – 3.81 miles
Turn left onto Spencer Hwy – 1.4 miles
Turn right onto Bayshore Ave – 0.2 miles
Turn right onto Medical Cir – 72 feet
Destination will be on left

Bayshore Medical Center
4000 Spencer Highway
Pasadena, TX 77504

EVACUATION DIAGRAM
REFINERY



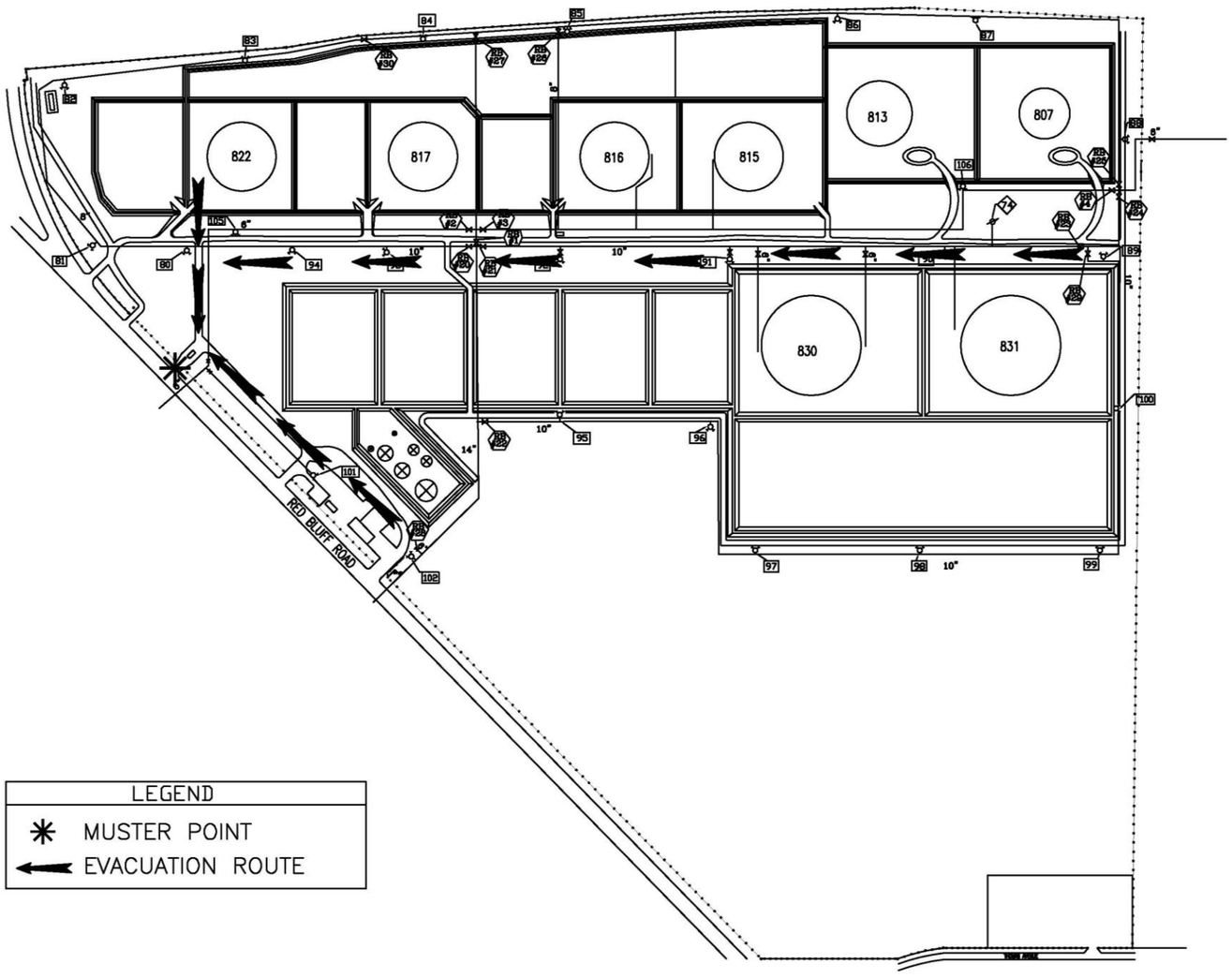
Evacuation Diagram

Pasadena Refining System, Inc
Pasadena, TX

DATE:	JOB No:	SCALE:	EDITED BY:
2/24/15	–	AS NOTED	MJDS

WITT | O'BRIEN'S
818 Town & Country, Ste 200
Houston, Texas 77024
Phone (281)320-9796
Fax (281) 320-9700

EVACUATION DIAGRAM
RED BLUFF TANK FARM



NOTE:
Facility piping diagrams are maintained in the refinery's drawings data base and is organized according to each unit. Access to each diagram is available through the Drafting Department File Room.

LEGEND

✳ MUSTER POINT

EVACUATION ROUTE

PASADENA REFINING SYSTEM, INC. RED BLUFF TANK FARM PASADENA, TEXAS	JOB NO: 59083	DATE: 04–08–14	EVACUATION DIAGRAM
	DRAWN: EDH	SCALE: N/S	

WITT | O'BRIEN'S
818 Town & Country Blvd., Suite 200
Houston, Texas 77024
Phone: (281) 320-9796

WASTE MANAGEMENT

OVERVIEW

A major oil spill response would generate significant quantities of waste materials ranging from oily debris and sorbent materials to sanitation water and used batteries. All these wastes need to be classified and separated (i.e., oily, liquid, etc.), transported from the site, and treated and/or disposed of at approved disposal sites. Each of these activities demands that certain health and safety precautions be taken, which are strictly controlled by federal and state laws and regulations. This section provides an overview of the applicable state regulations governing waste disposal, and a discussion of various waste classification, handling, transfer, storage, and disposal techniques. It is the responsibility of the Environmental Manager to manage waste disposal needs during an oil spill cleanup.

WASTE CLASSIFICATION

Oily - Liquid Wastes

Oily liquid wastes (i.e., oily water and emulsions) that would be handled, stored, and disposed of during response operations are very similar to those handled during routine storage and transfer operations. The largest volume of oily liquid wastes would be produced by recovery operations (e.g., through the use of vacuum devices or skimmers). In addition, oily water and emulsions would be generated by vehicle operations (e.g., spent motor oils, lubricants, etc.), and equipment cleaning operations.

Non-Oily - Liquid Wastes

Response operations would also produce considerable quantities of non-oily liquid wastes. Water and other non-oily liquid wastes would be generated by the storage area and storm water collection systems, vessel and equipment cleaning (i.e., water contaminated with cleaning agents), and office and field operations (i.e., sewage, construction activities).

Oily - Solid/Semi-Solid Wastes

Oily solid/semi-solid wastes that would be generated by containment and recovery operations include damaged or worn-out booms, disposable/soiled equipment, used sorbent materials, saturated soils, contaminated beach sediments, driftwood, and other debris.

Non-Oily - Solid/Semi-Solid Wastes

Non-oily solid/semi-solid wastes would be generated by emergency construction operations (e.g., scrap, wood, pipe, and wiring) and office and field operations (i.e., refuse). Vessel, vehicle, and aircraft operations also produce solid wastes.

WASTE HANDLING

A primary concern in the handling of recovered oil and oily debris is contaminating unaffected areas or recontaminating already cleaned areas. Oily wastes generated during the response operations would need to be separated by type and transferred to temporary storage areas and/or transported to recycle, treatment or disposal sites. Proper handling of oil and oily wastes is imperative to ensure personnel health and safety.

Safety Considerations

Care would be taken to avoid or minimize direct contact with oily wastes. All personnel handling or coming into contact with oily wastes would wear protective clothing. A barrier cream can be applied prior to putting on gloves to further reduce the possibility of oily waste absorption. Safety goggles would be worn by personnel involved in waste handling activities where splashing might occur. Any portion of the skin exposed to oily waste would be washed with soap and water as soon as possible. Decontamination zones would be set up during response operations to ensure personnel are treated for oil exposure.

Waste Transfer

During response operations, it may be necessary to transfer recovered oil and oily debris from one point to another several times before the oil and oily debris are ultimately recycled, treated or disposed of at an appropriate disposal site. Depending on the location of response operations, any or all of the following transfer operations may occur:

- From portable or vessel-mounted skimmers into flexible bladder tanks, storage tanks of the skimming vessel itself, or a barge.
- Directly into the storage tank of a vacuum device.
- From a skimming vessel or flexible bladder to a barge.
- From a vacuum device storage tank to a barge.
- From a barge to a tank truck.
- From a tank truck to a processing system (e.g., oil/water separator).
- From a processing system to a recovery system.
- Directly into impermeable bags that, in turn, are placed in impermeable containers.
- From containers to trucks.

There are four general classes of transfer systems that may be employed to affect oily waste transfer operations:

- **Pumps:** Rotary pumps, such as centrifugal pumps, may be used when transferring large volumes of oil, but they may not be appropriate for pumping mixtures of oil and water. The extreme shearing action of centrifugal pumps tends to emulsify oil and water, thereby increasing the viscosity of the mixture and causing low, inefficient transfer rates. The resultant emulsion would also be more difficult to separate into oil and water fractions. Lobe or "positive displacement" pumps work well on heavy, viscous oils, and do not emulsify the oil/water mixture. Double-acting piston and double acting diaphragm pumps are reciprocating pumps that may also be used to pump oily wastes.

***Waste Transfer* (Cont'd)**

- **Vacuum Systems**: A vacuum truck may be used to transfer viscous oils but they usually pick up a very high water/oil ratio.
- **Belt/Screw Conveyors:** Conveyors may be used to transfer oily wastes containing a large amount of debris. These systems can transfer weathered debris laden oil either horizontally or vertically for short distances (i.e., 10 feet) but are bulky and difficult to set up and operate.
- **Wheeled Vehicles:** Wheeled vehicles may be used to transfer liquid wastes or oily debris to storage or disposal sites. These vehicles have a limited transfer volume (i.e., 100 barrels) and require good site access.

Table F-1 provides a comparative evaluation of 15 types of transfer systems that could be available for transfer operations.

WASTE STORAGE

Interim storage of recovered oil, oily and non-oily waste would be considered to be an available means of holding the wastes until a final management method is selected. In addition, the segregation of wastes according to type would facilitate the appropriate method of disposal. The storage method used would depend upon:

- The type and volume of material to be stored.
- The duration of storage.
- Access.

During an oil spill incident, the volume of oil that can be recovered and dealt with effectively depends upon the available storage capacity. Typical short-term storage options are summarized in Table F-2. The majority of these options can be used either onshore or offshore. If storage containers such as bags or drums are used, the container must be clearly marked and/or color-coded to indicate the type of material/waste contained and/or the ultimate disposal option. Bladder or pillow tanks would be acceptable, if the available space can support the weight of both the container and the product.

Fuel barges may be the best option for temporary storage of oil recovered in open waters. Depending on size, these vessels may be able to hold up to 6,000 barrels of oil and water. The barge deck can be used as a platform for operating oil spill clean-up equipment and storing containment boom.

Empty barges have four to six feet draft which would increase when these barges are filled with oil or loaded with cargo. Consequently, they may not be able to enter shallow, nearshore waters.

It may be difficult to off-load recovered oil stored inside barges. Due to natural forces which affect spilled oil, recovered oil may be very viscous or emulsified, rather than free-flowing. It may be necessary to use steam to heat viscous oil before pumping it from the barge.

Steel or rubber tanks can be used to store oil recovered near the shoreline. To facilitate off loading, demulsifiers may be used to break emulsions prior to placing the recovered substance into the barges or storage tanks.

WASTE STORAGE (Cont'd)

Use of any site for storage is dependent on the approval of the local authorities. The following elements affect the choice of a potential storage site:

- Geology.
- Ground water.
- Soil.
- Flooding.
- Surface water.
- Slope.
- Covered material.
- Capacity.
- Climatic factors.
- Land use.
- Toxic air emissions.
- Security.
- Access.
- Public contact.

Temporary storage sites should use the best achievable technology to protect the environment and human health. They should be set up to prevent leakage, contact, and subsequent absorption of oil by the soil. The sites should be bermed (1 to 1.5 meters high) and double lined with plastic or visqueen sheets 6-10 millimeters or greater in thickness, without joints, prior to receiving loose and bagged debris. The edges of the sheet should be weighted with stones or earth to prevent damage by wind, and the sheet should be placed on a sand layer or an underfelt thick enough to prevent piercing. A reinforced access area for vehicles at the edge of the site should be provided. In addition, the oily debris should be covered by secured visqueen or tarps and an adequate storm water runoff collection system for the size and location of the site would be utilized. Additionally, the sites should be at least 3 meters above mean sea level.

Oily debris can be hauled to approved temporary storage sites in visqueen lined trucks or other vehicles. Burnable, non-burnable, treatable and re-usable materials can be placed in well defined separate areas at temporary storage sites.

When the last of the oily debris leaves a temporary storage site, the ground protection would be removed and disposed of with the rest of the oily debris. Any surrounding soil which has become contaminated with oil would also be removed for disposal or treatment. If the soils were removed for treatment, they may be replaced if testing proves acceptable levels have been achieved. Treatment and remediation is encouraged when feasible. The temporary storage should be returned to its original condition.

WASTE DISPOSAL

Techniques for Disposal of Recovered Oil

Recovery, reuse, and recycling are the best choices for remediation of a spill, thereby reducing the amount of oily debris to be disposed of at a solid waste landfill. Treatment is the next best alternative, landfill disposal is a final option. Treatment or stabilization prior to landfilling may be required for some wastes including Hazardous Wastes with Land Disposal Restrictions.

During an oil spill incident, PRSI would consult with the federal and state On Scene Coordinator (OSC) to identify the acceptable disposal methods and sites appropriately authorized to receive such wastes. PRSI maintains a list of approved disposal sites that satisfy local, state, and federal regulations and company requirements. This identification of suitable waste treatment and disposal sites would be prepared by Environmental Matters Representative in the form of an Incident Disposal Plan which must be authorized by the U.S. Coast Guard and/or the EPA. An Incident Disposal Plan would include predesignated interim storage sites, segregation strategies, methods of treatment and disposal for various types of debris, and the locations/contacts of all treatment and disposal site selections. Onsite treatment/disposal will be preferred.

In order to obtain the best overall Incident Disposal Plan, a combination of methods should be used. There is no template or combination of methods that can be used in every spill situation. Each incident should be reviewed carefully to ensure an appropriate combination of disposal methods are employed.

The different types of wastes generated during response operations would require different disposal methods. To facilitate the disposal of wastes, they should be separated by type for temporary storage, transport and disposal. Table F-3 lists some of the options that would be available to segregate oily wastes. The table also depicts methods that may be employed to separate free and/or emulsified water from the oily liquid waste.

The following is a brief discussion of some disposal techniques available for recovered oil and oily debris.

Recycling

This technique entails removing water from the oil and blending the oil with uncontaminated oil. Recovered oil can be processed in the refinery to remove water and be run through the normal refining processes with other recovered oil. Non-hazardous Oily Dirt can be recycled into Department of Transportation Specification Material at approved HPP/Southern Crushed Concrete recycling facilities.

PRSI's **Environmental Manager** is responsible for ensuring that all waste materials be properly disposed of at a PRSI internally approved disposal site.

Landfill Disposal

Class 1 non-hazardous Oily Trash and Oily Dirt can be disposed of at the Waste Management Conroe Landfill. Class 2 non-hazardous Oily Dirt can be disposed of at the Waste Management Landfill in Baytown. Disposal at a non-approved facility would require approval by PRSI **Environmental Manager** prior to sending any waste to such a facility.

In Situ Burning/Open Burning

Burning techniques entail igniting oil or oiled debris and allowing it to burn under ambient conditions. These disposal techniques are subject to restrictions and permit requirements established by federal, state and local laws. They would not be used to burn PCBs, waste oil containing more than 1,000 parts per million of halogenated solvents, or other substances regulated by the EPA. Permission for *in situ* burning may be difficult to obtain when the burn takes place near populated areas.

As a general rule, *in situ* burning would be appropriate only when atmospheric conditions will allow the smoke to rise several hundred feet and rapidly dissipate. Smoke from burning oil will normally rise until its temperature drops to equal the ambient temperature. Afterwards, it will travel in a horizontal direction under the influence of prevailing winds

Table F-1

TABLE F-1
COMPARATIVE EVALUATION OF OIL SPILL TRANSFER SYSTEMS

CHARACTERISTICS OF TRANSFER SYSTEMS	CENTRIFUGAL PUMP	LOBE PUMP	GEAR PUMP	INTERMESCHING SCREW	VALVE PUMP	FLEXIBLE IMPELLER	SCREW/AUGER PUMP	PROGRESSING CAVITY	PISTON PUMP	DIAPHRAGM PUMP	AIR CONVEYOR	VACUUM TRUCK	PORTABLE VACUUM PUMP	CONVEYOR BELT	SCREW CONVEYOR	WHEELED VEHICLES
High Viscosity Fluids	1	5	5	5	3	2	5	5	5	3	5	4	4	5	4	5
Low Viscosity Fluids	5	2	2	2	3	4	1	3	3	4	5	5	5	1	1	5
Transfer Rate	5	2	1	1	3	4	1	2	2	3	4	5	3	2	2	2
Debris Tolerance																
◦ Silt/Sand	5	3	1	1	1	4	5	5	3	4	5	5	5	5	5	5
◦ Gravel/Particulate	5	2	1	1	1	2	5	3	2	3	5	5	4	5	4	5
◦ Seaweed/Stringy Matter	2	3	4	3	2	2	4	4	3	3	4	4	3	5	4	5
Tendency to Emulsify Fluids	1	4	3	3	3	3	5	5	2	5	5	5	5	5	5	5
Ability to Run Dry	5	3	2	1	2	3	4	3	3	2	5	5	5	4	3	
Ability to Operate Continuously	5	3	2	2	2	3	3	3	4	4	3	3	3	3	2	4
Self Priming	1	3	2	2	2	5	1	5	4	4	5	5	5	5	5	
Suction/Head	2	3	2	2	3	4	1	5	5	2	1	1	1	3	3	
Back Pressure/Head	1	5	5	5	4	3	4	5	2	4			2	1	1	
Portability	5	3	3	2	4	4	3	2	3	5	1	1	2	3	2	3
Ease of Repair	5	3	2	2	3	4	3	2	3	5	1	1	2	2	2	3
Cost	5	B	2	2	3	3	1	2	B,D	A,C,D	F,G,I	F,G,I	F,G			G,H,I
Comments	E,J	B	B	B,J		F	A	B								

KEY TO RATINGS: 5 = Best; 1 = Worst

KEY TO COMMENTS:

A. Normally require remote power sources, thus are safe around flammable fluids.
B. Should have a relief valve in the outlet line to prevent bursting hoses.
C. Air powered units tend to freeze up in sub-freezing temperatures.
D. Units with work ball valves are difficult to prime.
E. Some remotely powered types are designed to fit in a tanker's butterworth hatch.
F. Can also pump air at low pressure.
G. Transfer is batch-wise rather than continuous.
H. Waste must be in separate container for efficient transfer.
I. Transpsortable with its own prime mover.
J. High sheer action tends to emulsify oil and water mixtures.

Table F-2

TEMPORARY STORAGE METHODS

CONTAINER	ONSHORE	OFFSHORE	SOLIDS	LIQUIDS	NOTES
Barrels	x	x	x	x	May require handling devices. Covered and clearly marked.
Tank Trucks	x	x		x	Consider road access. Barge-mounted offshore.
Dump/Flat Bed Trucks	x		x		May require impermeable liner and cover. Consider flammability of vapors at mufflers.
Barges		x	x	x	Liquids only in tanks. Consider venting of tanks.
Oil Storage Tanks	x	x		x	Consider problems of large volumes of water in oil.
Bladders	x	x		x	May require special hoses or pumps for oil transfer.

Table F-3

OILY WASTE SEPARATION AND DISPOSAL METHODS

TYPE OF MATERIAL	SEPARATION METHODS	DISPOSAL METHODS
LIQUIDS		
Non-emulsified oils	Gravity separation of free water	Use of recovered oil as refinery/production facility feedstock
Emulsified oils	Emulsion broken to release water by: ● heat treatment ● emulsion breaking chemicals ● mixing with sand ● centrifuge ● filter/belt press	Use of recovered oil as refinery/production facility feedstock
SOLIDS		
Oil mixed with sand	Collection of liquid oil leaching from sand during temporary storage Extraction of oil from sand by washing with water or solvent Removal of solid oils by sieving	Use of recovered oil as refinery/production facility feedstock Direct disposal Stabilization with inorganic material Degradation through land farming or composting
Oil mixed with cobbles or pebbles	Screening Collection of liquid oil leaching from materials during temporary storage Extraction of oil from materials by washing with water or solvent	Direct Disposal Use of recovered oil as refinery/production facility feedstock
Oil mixed with wood, seaweed and sorbents	Screening Collection of liquid oil leaching from debris during temporary storage Flushing of oil from debris with water	Direct disposal Degradation through land farming or composting for oil mixed with seaweed or natural sorbents
Tar balls	Separation from sand by sieving	Direct disposal

Table F-4

DISPOSAL PLAN

MATERIAL	DISPOSAL FACILITY	LOCATION	RCRA PERMIT/MANIFEST
1. Recovered Product	On-site	Recovered Oil System	N/A
2. Contaminated Soil	On-site	In-Situ	N/A
3. Contaminated Soil	Waste Management	Conroe, Texas	Manifest
4. Contaminated Soil	HPP/SCC	Various	N/A
5. Contaminated Soil	HPP/SCC	Various	N/A
6. Contaminated Equipment	On-Site	Clean-up Pad	N/A
7. Contaminated Equipment	Waste Management	Conroe, Texas	Manifest
8. Contaminated Equipment	Veolia	Port Arthur, Texas	Both
9. Personnel Protective Equipment	Waste Management	Conroe, Texas	Manifest
10. Personnel Protective Equipment	Veolia	Port Arthur, Texas	Both
11. Decontamination Solution	On-Site	Process Sewer	N/A
12. Absorbents	Waste Management	Conroe, Texas	Manifest
13. Absorbents	Veolia	Port Arthur, Texas	Both
14. Spent Chemicals	On-Site	Recovered Oil system	N/A
15. Spent Chemicals	On-Site	Process Sewer	N/A
16. Spent Chemicals	Waste Management	Conroe, Texas	Manifest
17. Spent Chemicals	Veolia	Port Arthur, Texas	Both
18. Spent Chemicals	CWM	Port Arthur, Texas	Both
19. Spent Chemicals	CWM	Sulfur, Louisiana	Both

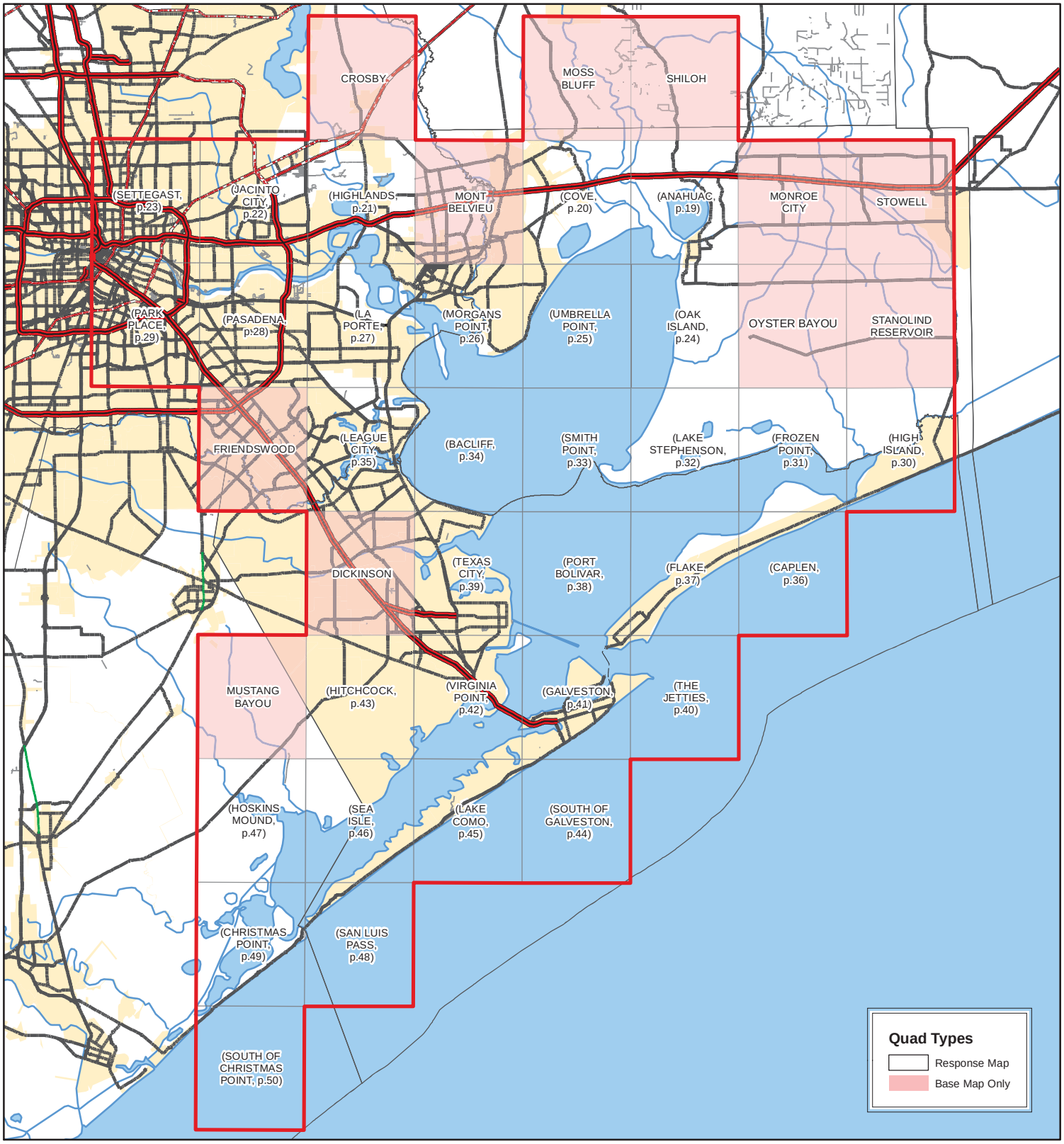
FIGURE 6.3

ENVIRONMENTAL SENSITIVITY MAPS

The following Environmental Sensitivity Maps have been prepared utilizing Texas General Land Office and National Oceanic & Atmospheric Administration's Texas Oil Spill Planning and Response Atlas as the base. The maps include a key to the reference symbols located on each map.

Remember these maps are to be utilized as guidelines only. During an actual response effort, Federal, State and Local agencies should be contacted to provide further assistance in the proper identification and protection of the various environmental and socio-economic sensitive areas.

Galveston Bay System Index Map



1:600,000

Nautical Miles
0 2.5 5 10 15

Miles
0 2.5 5 10 15

Kilometers
0 2.5 5 10 15

N

OIL SPILL PREVENTION AND RESPONSE PROGRAM

TEXAS
GENERAL LAND OFFICE
OIL SPILL
PREVENTION & RESPONSE

LEGEND

ENVIRONMENTAL SENSITIVITY INDEX

- MANGROVE MARSH (10D)
- FRESHWATER SWAMPS (10C)
- FRESHWATER MARSHES (10B)
- SALT AND BRACKISH MARSHES (10A)
- SHELTERED TIDAL FLATS (9)
- SHELTERED ROCKY/KARST SHORES (8D)
- SHELTERED SCARPS (8C)
- SHELTERED RIPRAP STRUCTURES (8B)
- SHELTERED SOLID MAN-MADE STRUCTURES (8A)
- EXPOSED TIDAL FLATS (7)
- EXPOSED RIPRAP STRUCTURES (6B)
- GRAVEL OR SHELL BEACHES (6A)
- MIXED SAND AND GRAVEL OR SHELL BEACHES (5)
- COARSE-GRAINED SAND BEACHES (4)
- SCARPS AND STEEP SLOPES IN SAND (3B)
  FINE-GRAINED SAND BEACHES (3A)
- WAVE-CUT CLAY PLATFORMS (2B)
  SCARPS AND STEEP SLOPES IN CLAY (2A)
- EXPOSED WALLS AND OTHER SOLID STRUCTURES (1)

HYDROGRAPHY

- MARSH, WETLAND
- TIDAL, MUD OR SAND FLATS
- BEACH, BAR
- INTERMITTENT WATER BODY
- DUNES
- SUBMERGED AQUATIC VEGETATION
- MANGROVES
- OYSTERS

PRIORITY PROTECTION AREAS

- HIGH MEDIUM
- MEDIUM PRIORITY
- LOW PRIORITY

BIOLOGICAL RESOURCES

- DIVING BIRDS
- GULLS/TERNS
- PASSERINE BIRDS
- PELAGIC BIRDS
- RAPTORS
- SHOREBIRDS
- WADING BIRDS
- WATERFOWL
- FISH
- DOLPHINS
- SMALL MAMMALS
- UPLAND/WETLAND PLANTS
- SUBMERGED AQUATIC VEGETATION
- ALLIGATOR
- TURTLES
- OTHER REPTILES/AMPHIBIANS
- BIVALVES
- CRABS
- GASTROPODS
- SHRIMP
- SQUID
- THREATENED/ENDANGERED SPECIES

POLITICAL BOUNDARIES

- COUNTY BOUNDARY
- MUNICIPAL BOUNDARY

TRANSPORTATION

- DIVIDED HIGHWAY
- STATE/FEDERAL HIGHWAY
- CITY STREET/COUNTY ROAD
- AIRPORT
- RAILROAD
- SHIP CHANNEL/GULF INTRACOASTAL WATERWAY
- SHIPPING SAFETY FAIRWAY

HUMAN USE FEATURES

- AQUACULTURE SITE
- BEACH ACCESS POINT
- BOAT RAMP
- COAST GUARD STATION
- HELIPORT
- LIGHTHOUSE
- MARINA
- WATER INTAKE POINT

OTHER LAYERS

- ANCHORAGE AREA
- AUDUBON SANCTUARY
- BIRD ROOKERY AREA
- CITY OR COUNTY PARK
- COASTAL PRESERVE
- MUNICIPAL AREA
- NATIONAL WILDLIFE REFUGE
- STATE PARK/WILDLIFE MANAGEMENT AREA
- WASHOVER AREA

PARK PLACE

(SETTEGAST, p.23)

DATA ACP

Oil Spill Planning and Response Atlas Upper Coast of Texas 2013

The Texas General Land Office makes no representations or warranties regarding the accuracy or completeness of the information depicted on this map or the data from which it was produced. This map is not suitable for navigational purposes and does not purport to depict boundaries of private and public land.

Depth Soundings in Feet

PRIORITY PROTECTION AREAS

- HIGH
- MEDIUM
- LOW

HUMAN-USE FEATURES

- Heliports
- Coast Guard Station

ENVIRONMENTAL SENSITIVITY INDEX

- 10D Mangroves and Woody Vegetation
- 10C Freshwater Swamps
- 10B Freshwater Marshes
- 10A Salt and Brackish Water Marshes
- 9 Sheltered Tidal Flats
- 8C Sheltered Rocky/Karst Shores
- 8D Sheltered Scarps
- 8B Sheltered Riprap Structures
- 8A Sheltered Solid Manmade Structures
- 7 Exposed Tidal Flats
- 6B Exposed Riprap Structures
- 6A Gravel or Shell Beaches
- 5 Mixed Sand and Gravel or Shell Beaches
- 4 Coarse-Grained Sand Beaches
- 3B Scraps and Steep Slopes in Sand
- 3A Fine-Grained Sand Beaches
- 2B Wave-Cut Clay Platforms
- 2A Scraps and Steep Slopes in Clay
- 1 Exposed Walls and Other Solid Structures

- Geographic Response Plans
- Counties TCEQ
- City Limits

PARK PLACE

Map #29

HUMAN USE RESOURCES

Coast Guard Facilities

RARNUM	NAME	PHONE
H426	MSO Houston/Houston Station	(713) 672-6639

Heliports

RARNUM	MANAGER	PHONE
H1211	Tom R. Lewis	
H1218	Raleigh Abner	(713) 921-8181
H1234	J.W. Snelson	(713) 641-0281
H1235	Captian Waggett	(713) 672-6639
H1241	William D. Shirley	(713) 991-6300
H1245	Dudley Tarlton	(713) 871-8010
H1276	Houston Police Department	(713) 731-5212

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom south entrance to Harrisburg Bend.

Safety Note: Crews operating near ship channel should expect wake action as vessels pass. Debris is a common occurrence. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
29 A	Park Place	11325	29	Harris

13. Site Information

Southeast entrance into Harrisburg Bend. Harrisburg Bend extends around Brady Island, on the Houston Ship Channel. The southeast entrance is adjacent to Southwest Shipyard Brady Island facility.

14. Latitude 29-43-25N

15. Longitude 95-16-15W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
NA	NA	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston

No ramps in area. Minutes by boat from MSO Houston-Galveston.

20. Closest Airport Houston Hobby (HOU)

21. Closest Helispot MSO Houston-Galveston

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: N/A

Environmental: N/A

Economic: N/A

24. Width of Inlet 250'

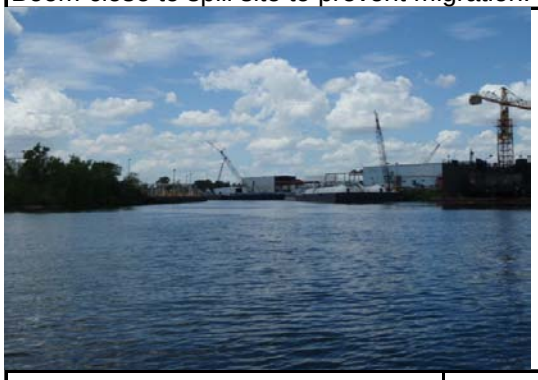
25. Water depth 17'

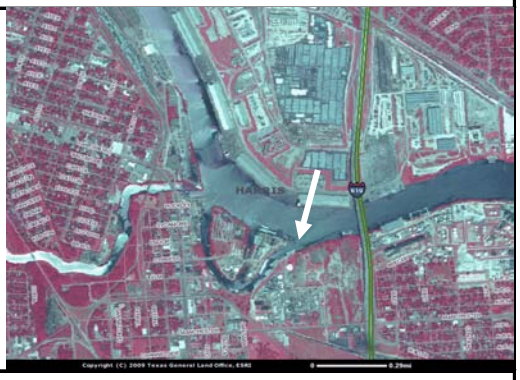
26. Current Slow

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom close to spill site to prevent migration.





29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom north entrance to Harrisburg Bend.

Safety Note: Crews operating near ship channel should expect wake action as vessels pass. Debris is a common occurrence. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
29 B	Park Place	11325	29	Harris

13. Site Information

Northwest entrance into Harrisburg Bend. Harrisburg Bend extends around Brady Island, on the Houston Ship Channel. It is adjacent to Southwest Shipyard Brady Island facility.

14. Latitude 29-43-35N

15. Longitude 95-16-36W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
NA	NA	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston

No ramps in area. Minutes by boat from MSO Houston-Galveston.

20. Closest Airport Houston Hobby (HOU)

21. Closest Helispot MSO Houston-Galveston

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: N/A

Environmental: N/A

Economic: N/A

24. Width of Inlet 250'

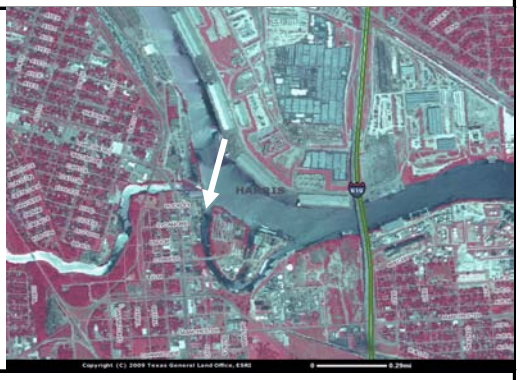
25. Water depth 23'

26. Current Slow

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom close to spill site to prevent migration.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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				☐

7. Assignments

Boom entrance to Brays Bayou.

Safety Note:

Debris is a common occurrence. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
29 C	Park Place	11325	29	Harris

13. Site Information

Entrance to Brays Bayou. Brays Bayou extends from the Houston Ship Channel westward for several miles into Houston. The entrance is heavily commercialized, but most of the bayou has grassy banks.

14. Latitude 29-43-37N

15. Longitude 95-16-38W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
NA	NA	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston

No ramps in area. Minutes by boat from MSO Houston-Galveston.

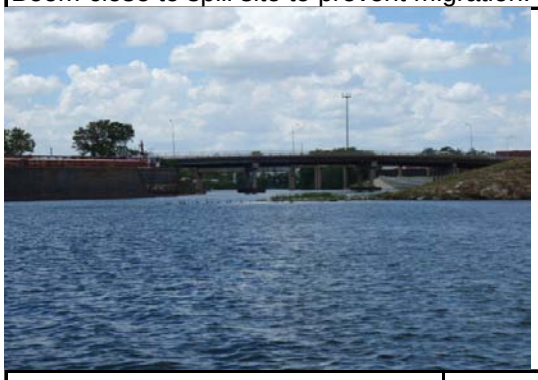
20. Closest Airport Houston Hobby (HOU)

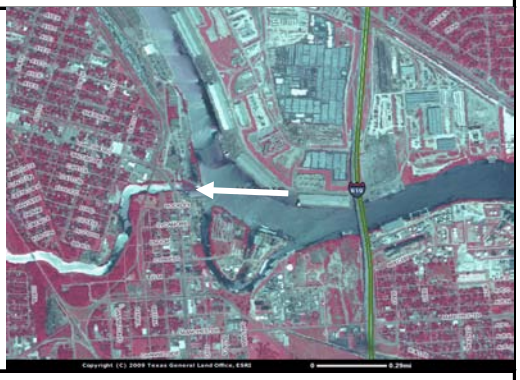
21. Closest Helispot MSO Houston-Galveston

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	150'
TGLO	281-470-6597	N/A	**25. Water depth** 22'
TCEQ	512-463-7727	Environmental:	
RCC	713-869-5001	N/A	**26. Current** Slow
TPWD	281-534-0130	Economic:	**27. # of Personnel** 2-4
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

Boom close to spill site to prevent migration.





29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

PASADENA

(JACINTO CITY, p.22)

(PARK PLACE, p.29)

(LA PORTE, p.27)

(FRIENDSWOOD)

95°15'0"W 95°14'0"W 95°13'0"W 95°12'0"W 95°11'0"W 95°10'0"W 95°9'0"W 95°8'0"W

29°45'0"N 29°44'0"N 29°43'0"N 29°42'0"N 29°41'0"N 29°40'0"N 29°39'0"N 29°38'0"N

North Latitude

West Longitude

TEXAS GENERAL LAND OFFICE OIL SPILL PREVENTION & RESPONSE

Oil Spill Planning and Response Atlas Upper Coast of Texas 2013

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Miles 0 0.5 1

Nautical Miles 0 0.5 1

Feet 0 2,500 5,000

Kilometers 0 1 2

Depth Soundings in Feet

PRIORITY PROTECTION AREAS

- HIGH
- MEDIUM
- LOW

HUMAN-USE FEATURES

- Heliports
- Water Intake Point

ENVIRONMENTAL SENSITIVITY INDEX

- 10D Mangroves and Woody Vegetation
- 10C Freshwater Swamps
- 10B Freshwater Marshes
- 10A Salt and Brackish Water Marshes
- 9 Sheltered Tidal Flats
- 8C Sheltered Rocky/Karst Shores
- 8D Sheltered Scarps
- 8B Sheltered Riprap Structures
- 8A Sheltered Solid Manmade Structures
- 7 Exposed Tidal Flats
- 6B Exposed Riprap Structures
- 6A Gravel or Shell Beaches
- 5 Mixed Sand and Gravel or Shell Beaches
- 4 Coarse-Grained Sand Beaches
- 3B Scraps and Steep Slopes in Sand
- 3A Fine-Grained Sand Beaches
- 2B Wave-Cut Clay Platforms
- 2A Scraps and Steep Slopes in Clay
- 1 Exposed Walls and Other Solid Structures

- Geographic Response Plans
- Counties TCEQ
- City Limits

PASADENA

Map #28

HUMAN USE RESOURCES

Heliports

RARNUM	MANAGER	PHONE
H1309	LT P.D. Cobb	(713) 477-1221
H1310	J. A. Stallings	(713) 944-5347
H1311	John Pittman	(713) 479-3435
H1312	Dennis Knox	(713) 477-0411
H1313	Administrator	(713) 944-6666
H1314	Duard Franklin	(713) 740-1121
H1346	R.L. Moore Division Manager	(713) 623-7119

Water Intake Points

RARNUM	OWNER	TYPE
H065	Oiltanking of Texas Inc.	6
H066	Phillips 66 Corporation	6
H067	Ethyl Corporation	6
H068	Mobil Oil Corporation	6
H069	Armco Inc.	6
H070	Houston L&P-Deepwater	6
H071	Paktank Corporation -Galena Park Term.	1

BIOLOGICAL RESOURCES

Reptiles/Amphibians

RARNUM	NAME	S/F	T/E
779	Crawfish frog	NA	N

Plants/Communities

RARNUM	NAME	S/F	T/E
778	Houston machaeranthera	F	C2

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-OS
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom entrance to Green's Bayou.

Safety Note:
Crews operating along the shoreline of the ship channel should expect wake action as vessels pass. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
28 A	Pasadena	11325	28	Harris

13. Site Information
Entrance to Green's Bayou. Green's Bayou extends from the Houston Ship Channel northward into Jacinto City. The entrance is heavily commercialized. Debris is a common occurrence at the mouth. Red Channel Marker 152.

14. Latitude 29-44-51N

15. Longitude 95-10-05W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
no public ramps, private ramps at facilities	N/A	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston
No ramps available. Minutes by boat from MSO Houston-Galveston.

20. Closest Airport William P. Hobby (HOU)

21. Closest Helispot Ethyl Corp. (H1314)

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk
Atlas Priority: N/A
Environmental: N/A
Economic: N/A

24. Width of Inlet 600'

25. Water depth 32'

26. Current slow

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom close to spill site to prevent migration.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom entrance to Vince Bayou.

Safety Note: Crews operating along the shoreline of the ship channel should expect wake action as vessels pass. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
28 E	Pasadena	11325	28	Harris

13. Site Information
Entrance to Vince Bayou. Vince Bayou is a narrow, shallow and seldom used bayou extending from the Houston Ship Channel southward into Houston. Protective boom would need to be anchored into mud/grass banks.

14. Latitude 29-43-28N

15. Longitude 95-13-26W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
no public ramps, private ramps at facilities	N/A	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston
No ramps available. Minutes by boat from MSO Houston-Galveston.

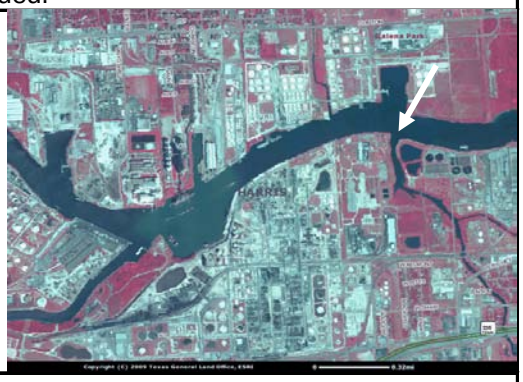
20. Closest Airport William P. Hobby (HOU)

21. Closest Helispot Ethyl Corp. (H1314)

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	200'
TGLO	281-470-6597	N/A	**25. Water depth** 12'
TCEQ	512-463-7727	Environmental:	
RCC	713-869-5001	N/A	**26. Current** slow
TPWD	281-534-0130	Economic:	**27. # of Personnel** 2-4
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

300' of protective boom at a 45 degree angle below the site is recommended.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom entrance to Cotton Patch Bayou.

Safety Note: Crews operating along the shoreline of the ship channel should expect wake action as vessels pass. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
28 C	Pasadena	11325	28	Harris

13. Site Information

Entrance to Cotton Patch Bayou. Cotton Patch Bayou is a small bayou east of Kinder Morgan Pasadena Barge Dock 3. Across channel from Red marker 160.

14. Latitude 29-44-09N

15. Longitude 95-12-12W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
no public ramps, private ramps at facilities	N/A	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston

No ramps available. Minutes by boat from MSO Houston-Galveston.

20. Closest Airport William P. Hobby (HOU)

21. Closest Helispot Ethyl Corp. (H1314)

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	330'
TGLO	281-470-6597	N/A	**25. Water depth** 17'
TCEQ	512-463-7727	Environmental:	
RCC	713-869-5001	N/A	**26. Current** slow
TPWD	281-534-0130	Economic:	**27. # of Personnel** 2-4
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

Boom close to spill site to prevent migration.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom to protect marsh restoration inside Cotton Patch Bayou.

Safety Note:
In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
28 D	Pasadena	11325	28	Harris

13. Site Information
Marsh restoration inside Cotton Patch Bayou. The marsh is seperated from the bayou by a private bridge with two drain tubes. These drains could be boomed to isolate the marsh. East of Kinder Morgan Pasadena.

14. Latitude
29-44-02N

15. Longitude
95-11-58W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
no public ramps, private ramps at facilities	N/A	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston
No ramps available. Minutes by boat from MSO Houston-Galveston.

20. Closest Airport
William P. Hobby (HOU)

21. Closest Helispot
Ethyl Corp. (H1314)

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk
Atlas Priority: N/A
Environmental: N/A
Economic: N/A

24. Width of Inlet
20'

25. Water depth
0'

26. Current N/A

27. # of Personnel
2-4

28. Booming Strategy Recomendation

Boom across drain pipes to prevent migration into the marsh.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
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7. Assignments

Boom entrance to Vince Bayou.

Safety Note: Crews operating along the shoreline of the ship channel should expect wake action as vessels pass. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
28 E	Pasadena	11325	28	Harris

13. Site Information
Entrance to Vince Bayou. Vince Bayou is a narrow, shallow and seldom used bayou extending from the Houston Ship Channel southward into Houston. Protective boom would need to be anchored into mud/grass banks.

14. Latitude 29-43-28N

15. Longitude 95-13-26W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
no public ramps, private ramps at facilities	N/A	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston
No ramps available. Minutes by boat from MSO Houston-Galveston.

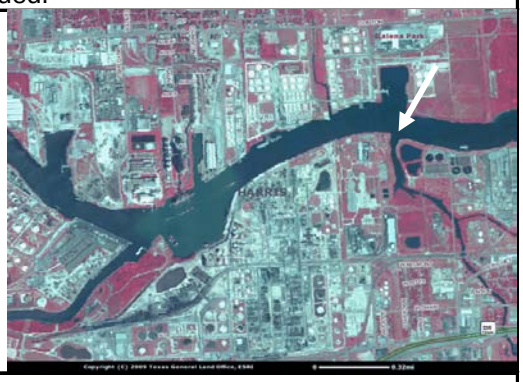
20. Closest Airport William P. Hobby (HOU)

21. Closest Helispot Ethyl Corp. (H1314)

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	200'
TGLO	281-470-6597	N/A	**25. Water depth** 12'
TCEQ	512-463-7727	Environmental:	
RCC	713-869-5001	N/A	**26. Current** slow
TPWD	281-534-0130	Economic:	**27. # of Personnel** 2-4
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

300' of protective boom at a 45 degree angle below the site is recommended.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
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				☐
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				☐

7. Assignments

Boom entrance to Panther Creek.

Safety Note: Crews operating along the shoreline of the ship channel should expect wake action as vessels pass. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
28 F	Pasadena	11325	28	Harris

13. Site Information
Entrance to Panther Creek. Panther Creek starts at the Houston Ship Channel and proceeds into downtown Galena Park. Located on west side of Kinder Morgan Galena Park facility.

14. Latitude 29-43-35N

15. Longitude 95-13-43W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
no public ramps, private ramps at facilities	N/A	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston
No ramps available. Minutes by boat from MSO Houston-Galveston.

20. Closest Airport William P. Hobby (HOU)

21. Closest Helispot Ethyl Corp. (H1314)

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk
Atlas Priority: N/A
Environmental: N/A
Economic: N/A

24. Width of Inlet 50'

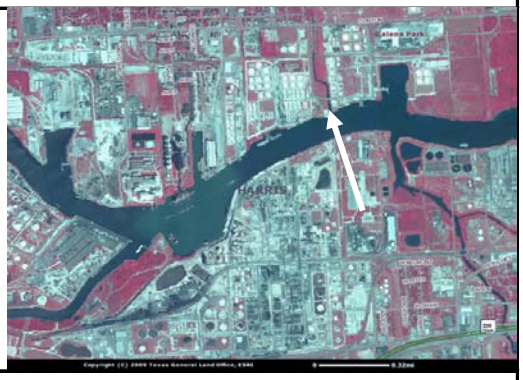
25. Water depth 3'

26. Current slow

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom across entrance to prevent migration inland.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
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				☐
				☐

7. Assignments

Boom entrance to Sims Bayou.

Safety Note: Crews operating along the shoreline of the ship channel should expect wake action as vessels pass. Debris is a common occurrence. Watch out for transients known to frequent the area. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
28 G	Pasadena	11325	28	Harris

13. Site Information Entrance to Sims Bayou. It can be reached in 5-10 minutes by boat from MSO Houston-Galveston. The bayou extends several miles into Houston with mostly 30 degree grass banks. At the entrance there are piers on either side that boom could be attached to. Manchester terminal to west.

14. Latitude 29-43-04N

15. Longitude 95-14-36W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
no public ramps, private ramps at facilities	N/A	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston

No ramps available. Minutes by boat from MSO Houston-Galveston.

20. Closest Airport William P. Hobby (HOU)

21. Closest Helispot Ethyl Corp. (H1314)

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: N/A

Environmental: N/A

Economic: N/A

24. Width of Inlet 475'

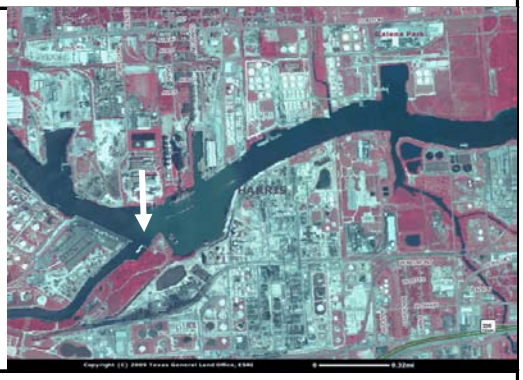
25. Water depth 36'

26. Current slow

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom close to spill site to prevent migration.

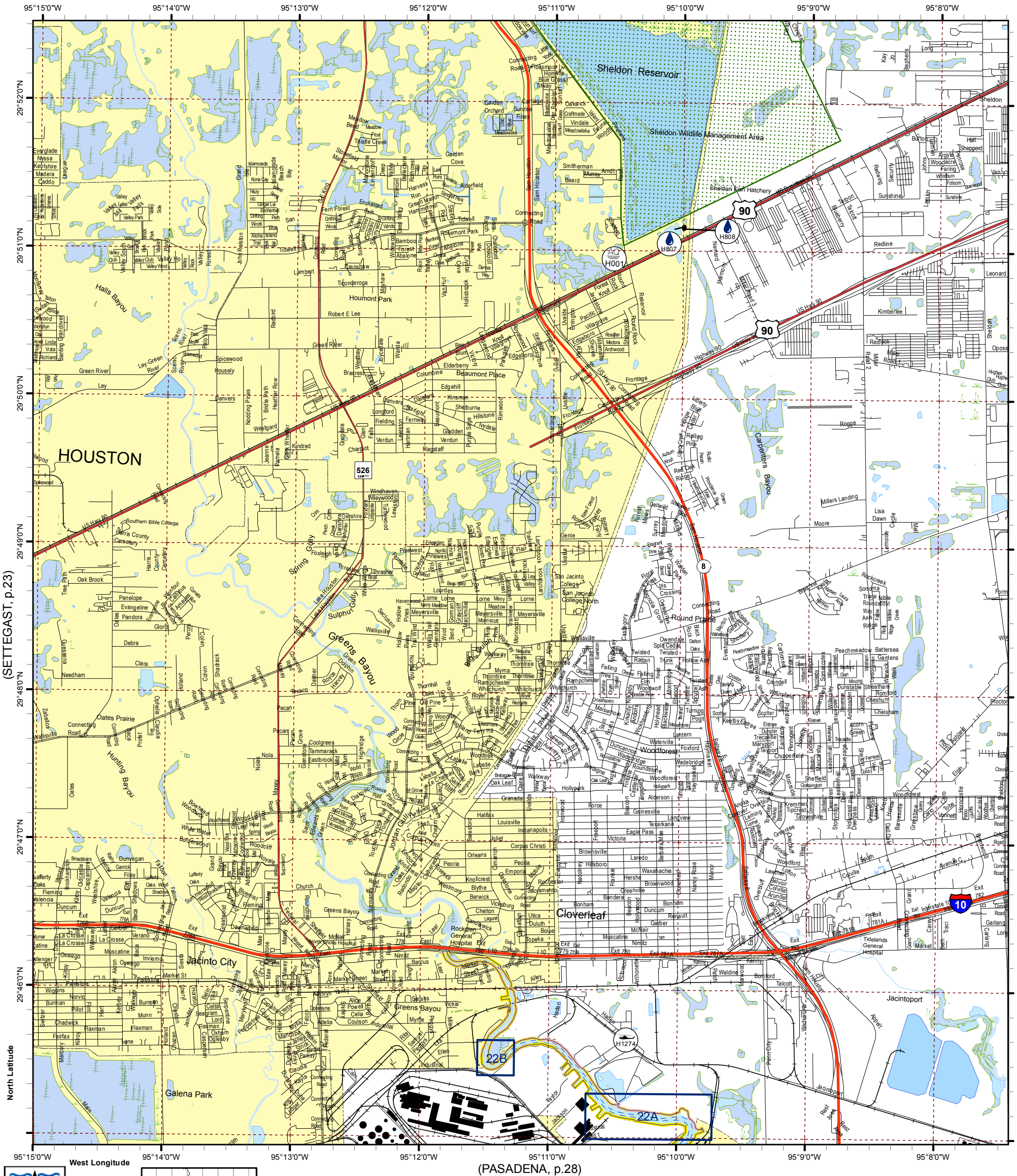


29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

JACINTO CITY

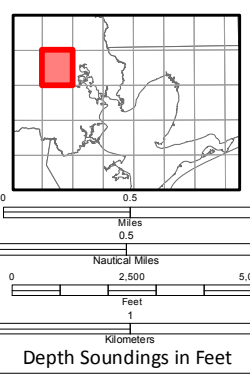
(HARMASTON)

DATA ACP



TEXAS GENERAL LAND OFFICE OIL SPILL PREVENTION & RESPONSE

Oil Spill Planning and Response Atlas
Upper Coast of Texas
2013



Depth Soundings in Feet

PRIORITY PROTECTION AREAS

- HIGH
- MEDIUM
- LOW

HUMAN-USE FEATURES

- Water Intake Point
- Heliports
- Aquaculture Site

ENVIRONMENTAL SENSITIVITY INDEX

- 10D Mangroves and Woody Vegetation
- 10C Freshwater Swamps
- 10B Freshwater Marshes
- 10A Salt and Brackish Water Marshes
- 9 Sheltered Tidal Flats
- 8C Sheltered Rocky/Karst Shores
- 8D Sheltered Scarps
- 8B Sheltered Riprap Structures
- 8A Sheltered Solid Manmade Structures
- 7 Exposed Tidal Flats
- 6B Exposed Riprap Structures
- 6A Gravel or Shell Beaches
- 5 Mixed Sand and Gravel or Shell Beaches
- 4 Coarse-Grained Sand Beaches
- 3B Scraps and Steep Slopes in Sand
- 3A Fine-Grained Sand Beaches
- 2B Wave-Cut Clay Platforms
- 2A Scraps and Steep Slopes in Clay
- 1 Exposed Walls and Other Solid Structures

- Geographic Response Plans
- Counties TCEQ
- City Limits

JACINTO CITY

Map #22

HUMAN USE RESOURCES

Aquaculture Sites

RARNUM	NAME	ADDRESS	PHONE
H001	Halbert Fish Farm	9025 Pineland Channelview 77530	(713) 458-8705

Heliports

RARNUM	MANAGER	PHONE
H1274	John D. McHazlett	(713) 455-1311

Water Intake Points

RARNUM	OWNER	TYPE
H807	Texas Parks & Wildlife Dept.	6
H808	Texas Parks & Wildlife Dept	6

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
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7. Assignments

Boom Green's Bayou close to spill site to prevent migration.

Safety Note:
During heavy rainfall currents can become dangerous. Watch out for transients know to frequent area.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
22 A	Jacinto City	N/A	22	Harris

13. Site Information
Upper Green's Bayou. Green's Bayou extends from the Houston Ship Channel inland for several miles into Northeast Houston. It is fairly deep, but narrow with mud/grass banks.

14. Latitude 29-46-16N

15. Longitude 95-12-17W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
no public ramps, private ramps at facilities	N/A	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston
No ramps available. Minutes by boat from MSO Houston-Galveston.

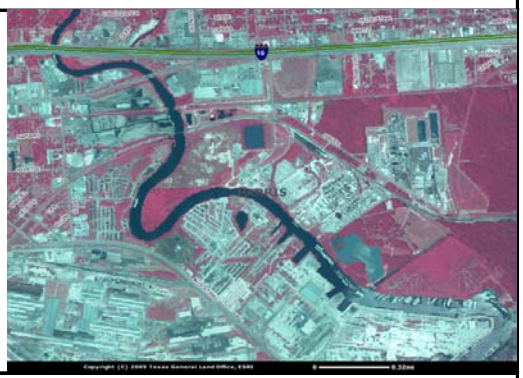
20. Closest Airport William P. Hobby (HOU)

21. Closest Helispot Mr. McHazlett (H1274)

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	200'
TGLO	281-470-6597	N/A	25. Water depth: 20'
TCEQ	512-463-7727	Environmental:	
RCC	713-869-5001	N/A	26. Current: Moderate
TPWD	281-534-0130	Economic:	27. # of Personnel: 2-4
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

Boom close to spill site to prevent migration.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom marsh area east bank south of railroad crossing.

Safety Note:
During heavy rainfall currents can become dangerous. Watch out for transients know to frequent area.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
22 B	Jacinto City	N/A	22	Harris

13. Site Information

Marsh in Green's Bayou. 1/2 NM in from the mouth of Green's Bayou is a sensitive marsh area inside a sharp bend of the bayou.

14. Latitude 29-45-33N

15. Longitude 95-11-19W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
no public ramps, private ramps at facilities	N/A	Shallow/Aluminum Hull

19. Directions From MSO Houston-Galveston

No ramps available. Minutes by boat from MSO Houston-Galveston.

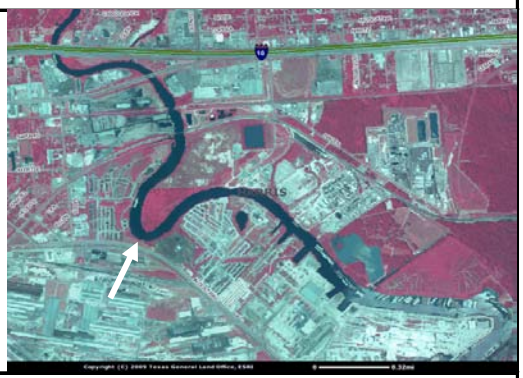
20. Closest Airport William P. Hobby (HOU)

21. Closest Helispot Mr. McHazlett (H1274)

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	200'
TGLO	281-470-6597	N/A	**25. Water depth** 20'
TCEQ	512-463-7727	Environmental:	
RCC	713-869-5001	N/A	**26. Current** Moderate
TPWD	281-534-0130	Economic:	**27. # of Personnel** 2-4
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

Boom with 2000' of boom to protect sensitive marsh.

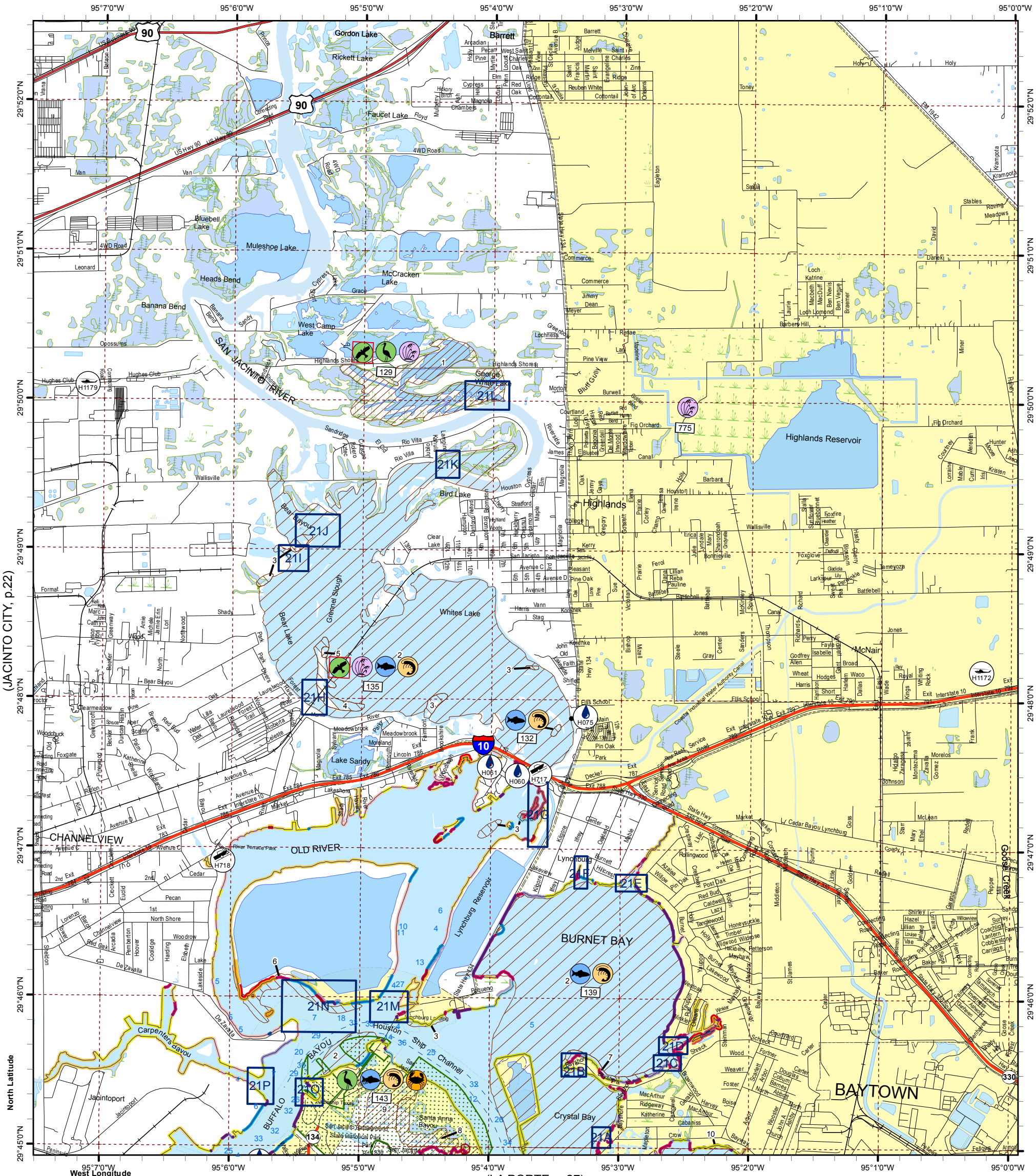


29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

HIGHLANDS

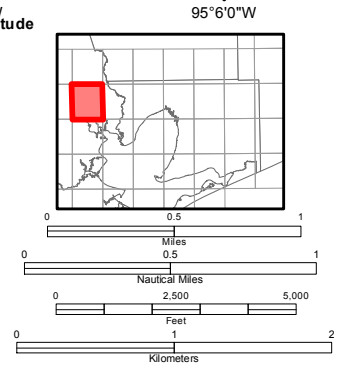
(CROSBY)

DATA ACP



TEXAS GENERAL LAND OFFICE OIL SPILL PREVENTION & RESPONSE

Oil Spill Planning and Response Atlas Upper Coast of Texas 2013



Depth Soundings in Feet

PRIORITY PROTECTION AREAS

- HIGH
- MEDIUM
- LOW

HUMAN-USE FEATURES

- Boat Ramps
- Water Intake Point
- Heliports

ENVIRONMENTAL SENSITIVITY INDEX

- 10D Mangroves and Woody Vegetation
- 10C Freshwater Swamps
- 10B Freshwater Marshes
- 10A Salt and Brackish Water Marshes
- 9 Sheltered Tidal Flats
- 8C Sheltered Rocky/Karst Shores
- 8D Sheltered Scarps
- 8B Sheltered Riprap Structures
- 8A Sheltered Solid Manmade Structures
- 7 Exposed Tidal Flats
- 6B Exposed Riprap Structures
- 6A Gravel or Shell Beaches
- 5 Mixed Sand and Gravel or Shell Beaches
- 4 Coarse-Grained Sand Beaches
- 3B Scraps and Steep Slopes in Sand
- 3A Fine-Grained Sand Beaches
- 2B Wave-Cut Clay Platforms
- 2A Scraps and Steep Slopes in Clay
- 1 Exposed Walls and Other Solid Structures

- Counties TCEQ
- City Limits
- Geographic Response Plans
- Bird Rookery

HIGHLANDS

Map #21

HUMAN USE RESOURCES

Boat Ramps

RARNUM	NAME
H717	Public boat launch
H718	River Terrace Park

Heliports

RARNUM	MANAGER	PHONE
H1172	John Pittman	(713) 479-3435
H1179	George Arnold	(713) 452-8888
H1180	George L. Clogston	(713) 673-7821

Water Intake Points

RARNUM	OWNER	TYPE
H060	Southwestern Barge Fleet Service	1
H061	Coopers Marine Service Inc.	1
H075	Western Towing Co.	1

BIOLOGICAL RESOURCES

Birds

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	NESTING	LAYING	HATCHING	FLEDGING
129	Osprey	S	SC		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Wading birds				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
135	Osprey	S	SC		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
143	Wading birds				X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-AUG	APR-AUG	MAY-SEP

Fish

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	LARVAL/JUV
132	Gulf menhaden				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	DEC-MAR
	Atlantic croaker				X	X	X	X	X	X	X	X	X	X	X	X	-	APR-OCT
	Gulf killifish				X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	APR-SEP
	Sheepshead minnow				X	X	X	X	X	X	X	X	X	X	X	X	MAR-OCT	MAR-DEC
135	Atlantic croaker				X	X	X	X	X	X	X	X	X	X	X	X	-	APR-OCT
139	Gulf menhaden				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	DEC-MAR
	Sand seatrout				X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-DEC
	Atlantic croaker				X	X	X	X	X	X	X	X	X	X	X	X	-	APR-OCT
	Spotted seatrout				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC
143	Spotted seatrout				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC

Shellfish

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	LARVAL/JUV.
132	White shrimp				X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-OCT
	Brown shrimp				X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	FEB-JUN
135	Grass shrimp				X	X	X	X	X	X	X	X	X	X	X	X	-	-
139	White shrimp			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-OCT
143	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
	Grass shrimp				X	X	X	X	X	X	X	X	X	X	X	X	-	-

Plants/Communities

RARNUM	NAME	S/F	T/E
129	Arrowhead		
135	Smooth cordgrass		
775	Threeflower broomweed		

HIGHLANDS Map # 21

Polygon #	*Priority*	*Description: what organism(s), habitat(s)?*
Pinchpoint at mouth of George White Lake can be boomed to protect polygon 1 from spills in San Jacinto River.		
1	Medium	**George White Lake**. Wetlands (medium), bird habitat (medium).
2	Low	**(a) Grennel Slough - Bear Lake - Gilbert Landing area, (b) Burnet Bay, (c) mouth of Buffalo Bayou.** Nursery (high).
3	Medium	**Fringe marshes along San Jacinto River (a - i).** Nursery (high), wetlands (medium).
4	Medium	**San Jacinto River island southeast of Bear Lake.** Nursery (high), bird habitat (medium).
5	High	**San Jacinto River island south of Grennel Slough.** Wetlands (high), nursery (high), bird habitat (medium).
6	Medium	**South shore of Old River meander island.** Wetlands (high), nursery (medium), bird habitat (medium).
7	Medium	**Fringe marsh along south shore of Burnet Bay.** Wetlands (high), nursery (high).
Pinchpoint at mouth of Santa Anna Bayou (on La Porte quad) can be boomed to protect polygons 8 and 9 from spills in San Jacinto River.		
8	High	**West shore of Santa Anna Bayou.** Wetlands (high), nursery (high). San Jacinto State Park. Continued on La Porte quad.
9	High	**Northern Santa Anna Bayou.** Nursery (high).
10	Low	**(a & b) Northern Scott Bay.** Nursery (high). Continued on La Porte quad.

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom cuts leading to marsh in SE Crystal Bay.

Safety Note:

All approaches to Crystal are through shallow water.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 A	Highlands	11329	21	Harris

13. Site Information

This marsh is along the southeast shore of Crystal Bay in Baytown, Tx.

14. Latitude 29-45-08N

15. Longitude 95-3-6W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	3.8 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd to Market St. Left on Market St. and look for River Terrace park entrance on Right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Medium Priority

Economic: N/A

24. Width of Inlet 100'

25. Water depth shallow

26. Current N/A

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Exclusion boom canals to prevent oil from entering marsh areas.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-OS
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom park area West of Bayshore Road.

Safety Note:

All approaches to Crystal are through shallow water. Very shallow nearshore, airboats may be needed.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 B	Highlands	11329	21	Harris

13. Site Information

Crystal Bay- Park west of Bayshore Road. This park is on an isthmus between Crystal and Burnet Bays. There is frings marsh arouns most of it that needs protecting.

14. Latitude 29-45-26N

15. Longitude 95-3-15W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	3.8 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd to Market St. Left on Market St. and look for River Terrace park entrance on Right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium Priority

Environmental: Medium Priority

Economic: N/A

24. Width of Inlet N/A

25. Water depth shallow

26. Current N/A

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom with 1500' of boom to protect exposed fringe marsh.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-OS

3. Branch	4. Division/Group

5. Operations Personnel	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period — "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom to protect marsh at Brownwood Subdivision Nature Preserve.

Safety Note:

All approaches to Crystal are through shallow water. Very shallow nearshore, airboats may be needed.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 C	Highlands	11329	21	Harris

13. Site Information

Burnet Bay- Marsh at Brownwood Subdivision Nature Preserve. This sensitive marsh is along the south shore of Burnet Bay near Freshwater Bayou.

14. Latitude 29-45-37N

15. Longitude 95-2-40W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	3.8 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd to Market St. Left on Market St. and look for River Terrace park entrance on Right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	
USCG	713-671-5100	Atlas Priority:	N/A	
TGLO	281-470-6597	Medium Priority	25. Water depth	
TCEQ	512-463-7727	Environmental:	N/A	
RCC	713-869-5001	Medium Priority	26. Current	Slow
TPWD	281-534-0130	Economic:	27. # of Personnel	
USFWS	281-286-8282	N/A	2-4	

28. Booming Strategy Recomendation

Boom with 1000' of boom to protect exposed fringe marsh.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
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7. Assignments

Boom entrance to Freshwater Bayou.

Safety Note:

All approaches to Burnet Bay are through shallow water. Very shallow nearshore, airboats may be needed.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 D	Highlands	11329	21	Harris

13. Site Information

Burnet Bay- Entrance to Freshwater Bayou. Freshwater Bayou is at the Southeast corner of Burnet Bay and leads into housing in Baytown. Along the banks are fringe marshes that need protecting.

14. Latitude 29-45-40N

15. Longitude 95-2-39W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	3.8 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd to Market St. Left on Market St. and look for River Terrace park entrance on Right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Medium Priority

Economic: N/A

24. Width of Inlet 450

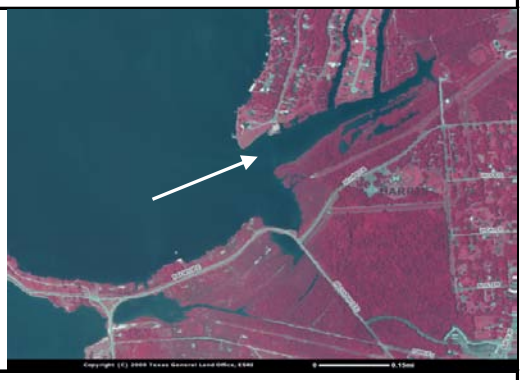
25. Water depth 4'

26. Current Slow

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom across entrance to prevent migration inland.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-OS
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom entrance to Spring Bayou.

Safety Note:

All approaches to Burnet Bay are through shallow water. Very shallow nearshore, airboats may be needed.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 E	Highlands	N/A	21	Harris

13. Site Information

Burnet Bay- Entrance to Spring Bayou. Spring Bayou is at the Northeast corner of Burnet Bay and leads into housing in Baytown. Along the banks are fringe marshes that need protecting.

14. Latitude 29-46-45N

15. Longitude 95-3-20W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	4.2 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd to Market St. Left on Market St. and look for River Terrace park entrance on Right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Medium Priority

Economic: N/A

24. Width of Inlet 400-600

25. Water depth 1'

26. Current Slow

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom across entrance to prevent migration inland.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom entrance to marsh East of Lakeview Road.

Safety Note:

All approaches to Burnet Bay are through shallow water. Very shallow nearshore, airboats may be needed.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 F	Highlands	N/A	21	Harris

13. Site Information

Burnet Bay- Marsh East of Lakeview Road. This sensitive marsh is along the northwest shore of Burnet Bay near Spring Bayou.

14. Latitude 29-45-56N

15. Longitude 95-4-47W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	4.2 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd to Market St. Left on Market St. and look for River Terrace park entrance on Right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Medium Priority

Economic: N/A

24. Width of Inlet 330-1000

25. Water depth N/A

26. Current N/A

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom with 1000' of boom to protect exposed fringe marsh.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect marsh area south of I-10 east bank.

Safety Note:

Swift current has been noted on the San Jacinto River near I-10.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 G	Highlands	11329	21	Harris

13. Site Information

Marshes along east bank of I-10 in San Jacinto River. These marshes are along the east bank of the San Jacinto River just below I-10. There are some barrier islands that boom could be anchored to for protection of inner marshes.

14. Latitude 29-47-25N

15. Longitude 95-3-46.6W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Riverside Marina	1.9 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Monmouth Road. North on Monmouth Rd. to T in road. Turn left and take first right, Park Rd. Proceed down Park Rd. to Riverside Marina.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium Priority

Environmental: Medium Priority

Economic: N/A

24. Width of Inlet 2000'

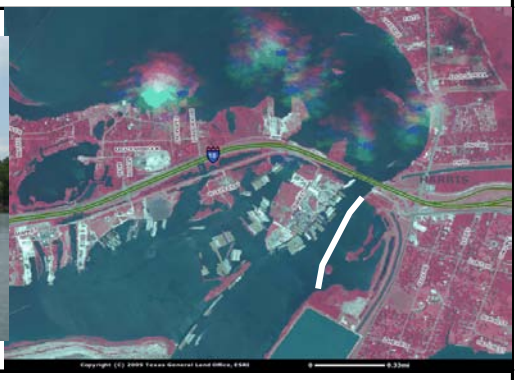
25. Water depth 1'

26. Current Moderate

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom with 2000' of boom to protect marsh.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect Parkers Cove.

Safety Note:
Very shallow water near the shoreline, airboats may be needed. Numerous tree stumps are located on the San Jacinto River. During periods of heavy rainfall the river current can be swift.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 H	Highlands	11329	21	Harris

13. Site Information
Bridge above Parker's Cove. This railroad bridge spans the main channel of the San Jacinto River and is a good choke point to prevent product migration downstream.

14. Latitude 29-47-58.4N

15. Longitude 95-5-21.4W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Riverside Marina	0.5 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Monmouth Road. North on Monmouth Rd. to T in road. Turn left and take first right, Park Rd. Proceed down Park Rd. to Riverside Marina.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium Priority

Environmental: Medium Priority

Economic: N/A

24. Width of Inlet 540'

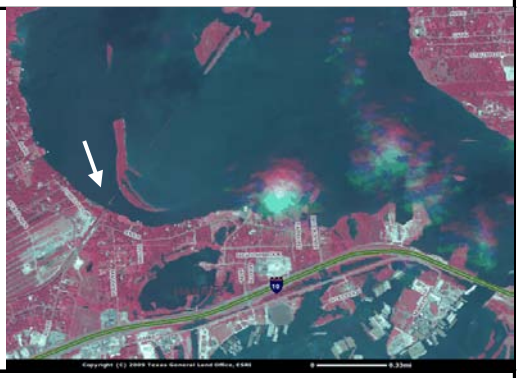
25. Water depth 20'

26. Current Moderate

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom at 45 degree angle with 1000' of boom to collect along west bank.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom cut to facility.

Safety Note:
Very shallow water near the shoreline, airboats may be needed. Numerous tree stumps are located on the San Jacinto River. During periods of heavy rainfall the river current can be swift.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 I	Highlands	11329	21	Harris

13. Site Information

Entrance to Lyondell Plant on San Jacinto River. This cut leads from the main channel of the San Jacinto River to the Lyondell Plant.

14. Latitude 29-48-58N

15. Longitude 95-5-34.2W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Riverside Marina	1.6 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Monmouth Road. North on Monmouth Rd. to T in road. Turn left and take first right, Park Rd. Proceed down Park Rd. to Riverside Marina.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Medium Priority

Economic: N/A

24. Width of Inlet 400

25. Water depth 15'

26. Current Slow

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom across entrance to prevent migration.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom entrance to Bear Bayou.

Safety Note:
Very shallow water near the shoreline, airboats may be needed. Numerous tree stumps are located on the San Jacinto River. During periods of heavy rainfall the river current can be swift.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 J	Highlands	11329	21	Harris

13. Site Information

Bear Bayou in San Jacinto River. Bear Bayou is a sensitive area just up channel of Lyondell. The bayou is full of stumps.

14. Latitude 29-49-08N

15. Longitude 95-5-20W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Riverside Marina	1.6 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Monmouth Road. North on Monmouth Rd. to T in road. Turn left and take first right, Park Rd. Proceed down Park Rd. to Riverside Marina.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	1000
TGLO	281-470-6597	Low Priority	25. Water depth 2'
TCEQ	512-463-7727	Environmental:	
RCC	713-869-5001	Medium Priority	26. Current Moderate
TPWD	281-534-0130	Economic:	27. # of Personnel
USFWS	281-286-8282	N/A	4-8

28. Booming Strategy Recomendation
Boom shallows on west side of channel to prevent migration into the bayou. Bear Bayou is very shallow with numerous tree stumps.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect entrance to marsh area before Banana bend.

Safety Note:
Very shallow water near the shoreline, airboats may be needed. Numerous tree stumps are located on the San Jacinto River. During periods of heavy rainfall the river current can be swift.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 K	Highlands	11329	21	Harris

13. Site Information

Entrance to marsh. Marsh complex is a sensitive area off of the San Jacinto River. Concrete walkdown present.

14. Latitude
29-49-34.4N

15. Longitude
95-4-24.9W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Riverside Marina	3.2 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Monmouth Road. North on Monmouth Rd. to T in road. Turn left and take first right, Park Rd. Proceed down Park Rd. to Riverside Marina.

20. Closest Airport
Baytown Airport, Baytown (HPY)

21. Closest Helispot
Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority:
Medium Priority
Environmental:
Medium Priority
Economic:
N/A

24. Width of Inlet
250'

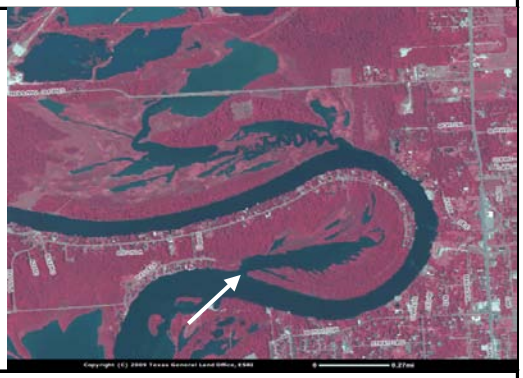
25. Water depth
6'

26. Current Slow

27. # of Personnel
2-4

28. Booming Strategy Recomendation

Boom across entrance to prevent migration into the marsh.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-OS
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect entrance to George White Lake.

Safety Note:
Very shallow water near the shoreline, airboats may be needed. Numerous tree stumps are located on the San Jacinto River. During periods of heavy rainfall the river current can be swift.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 L	Highlands	11329	21	Harris

13. Site Information

Entrance to George White Lake. George White Lake is a sensitive marsh area off of the San Jacinto River.

14. Latitude 29-49-59.4N

15. Longitude 95-3-55W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Riverside Marina	3.2 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Monmouth Road. North on Monmouth Rd. to T in road. Turn left and take first right, Park Rd. Proceed down Park Rd. to Riverside Marina.

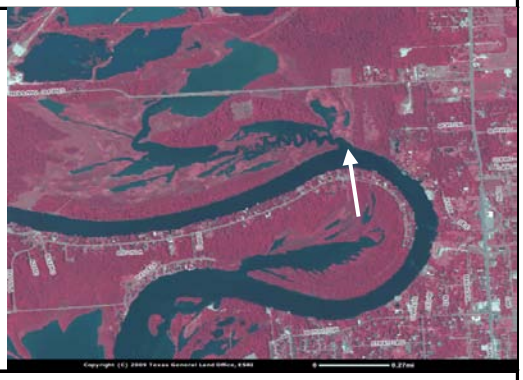
20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	300'
TGLO	281-470-6597	Medium Priority	25. Water depth 6'
TCEQ	512-463-7727	Environmental:	
RCC	713-869-5001	Medium Priority	26. Current Slow
TPWD	281-534-0130	Economic:	27. # of Personnel 2-4
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

Boom across entrance to prevent migration into the marsh.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-OS
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period — "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom entrance to San Jacinto River.

Safety Note:

Crews operating along the shoreline of the ship channel should expect wake action from passing vessels.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 M	Highlands	11329	21	Harris

13. Site Information

Entrance to San Jacinto River. This is where the San Jacinto River joins the Houston Ship Channel. The area is congested with vessel traffic. In case of emergency Contact Lynchburg Ferry 281-424-3521

14. Latitude 29-46-00N

15. Longitude 95-4-47W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	2.2 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd. to Market Street. Left on Market St. and look for park entrance on right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	850'
TGLO	281-470-6597	N/A	25. Water depth: 35'
TCEQ	512-463-7727	Environmental:	26. Current: Moderate
RCC	713-869-5001	N/A	27. # of Personnel
TPWD	281-534-0130	Economic:	4-8
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

Place cascading diversion boom along the western bank to prevent product migration.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-OS
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period — "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
					☐
					☐
					☐
					☐
					☐
					☐

7. Assignments

Boom entrance to Old River.

Safety Note:

Crews operating along the shoreline of the ship channel should expect wake action from passing vessels.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 N	Highlands	11329	21	Harris

13. Site Information

Entrance to Old River. This is where Old River joins the Houston Ship Channel. The area is congested with vessel traffic. At red channel marker 128

14. Latitude 29-45-53N

15. Longitude 95-5-13W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	2.2 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd. to Market Street. Left on Market St. and look for park entrance on right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	1500'
TGLO	281-470-6597	N/A	25. Water depth: 20'
TCEQ	512-463-7727	Environmental:	
RCC	713-869-5001	N/A	26. Current: Moderate
TPWD	281-534-0130	Economic:	27. # of Personnel: 4-8
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

Boom across entrance to prevent migration.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
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				☐
				☐

7. Assignments

Boom Battleship Texas State Historic Park.

Safety Note: Crews operating along the shoreline of the ship channel should expect wake action from passing vessels. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 O	Highlands	11329	21	Harris

13. Site Information

Battleship Texas State Historic Park. The Battleship Texas is in a cut off the Houston Ship Channel. 400' containment boom prestaged under walkway to Battleship.

14. Latitude 29-45-24N

15. Longitude 95-5-25W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	2.2 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd. to Market Street. Left on Market St. and look for park entrance on right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: N/A

Environmental: N/A

Economic: N/A

24. Width of Inlet 200'

25. Water depth 23'

26. Current Moderate

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom across entrance to prevent migration. Concrete culvert at back of slip leads to extensive marsh complex and special attention needs to be paid to tides and additional booming at culvert.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-OS
3. Branch	4. Division/Group	

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom entrance to Carpenter's Bayou.

Safety Note:
Crews operating along the shoreline of the ship channel should expect wake action from passing vessels. In security zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
21 P	Highlands	11329	21	Harris

13. Site Information

Entrance to Carpenter's Bayou. This is where Carpenter's Bayou joins the Houston Ship Channel. The area is congested with vessel traffic.

14. Latitude 29-45-24.5N

15. Longitude 95-5-42W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	2.2 NM	Shallow Aluminum Hull

19. Directions From MSO Houston-Galveston

610N to I-10E to Sheldon Road exit. Right on Sheldon Rd. to Market Street. Left on Market St. and look for park entrance on right.

20. Closest Airport Baytown Airport, Baytown (HPY)

21. Closest Helispot Baytown Airport, 29-47-09N 94-57-9W

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	650'
TGLO	281-470-6597	N/A	25. Water depth: 15'
TCEQ	512-463-7727	Environmental:	26. Current: Slow
RCC	713-869-5001	N/A	27. # of Personnel: 2-4
TPWD	281-534-0130	Economic:	
USFWS	281-286-8282	N/A	

28. Booming Strategy Recomendation

Boom across entrance to prevent migration.

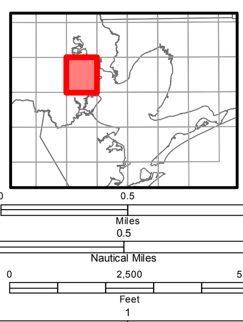
29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

LA PORTE

(HIGHLANDS, p.21)

DATA ACP

95°7'0"W
95°6'0"W
95°5'0"W
95°4'0"W
95°3'0"W
95°2'0"W
95°1'0"W
95°0'0"W
29°45'0"N
29°44'0"N
29°43'0"N
29°42'0"N
29°41'0"N
29°40'0"N
29°39'0"N
29°38'0"N
North Latitude
West Longitude
(PASADENA, p.28)
(MORGANS POINT, p.26)
(LEAGUE CITY, p.35)
BUFFALO BAYOU
San Jacinto Battleground State Historical Park
San Jacinto Monument
SCOTT BAY
Houston Ship Channel
Goat Islands
Peggy Lake
Barnes Island
Mitchell Bay
BAYTOWN
Alexander Island
Upper San Jacinto Bay
Black Duck Bay
Blackwell Peninsula
Brinson Pt
Baytown Tunnel
Lower San Jacinto Bay
Spilmans Island
Barbours Cut
Morgans Point
DEER PARK
PASADENA
LA PORTE
LA PORTE MUNICIPAL AIRPORT
GALVESTON BAY
Bayport
Bayside Terrace
Bay Oaks
Big Island Slough
Willow Springs Bayou
Patrick Bayou
East Fork Patrick Bayou
Tucker Bayou
Little Cedar Bayou
Bay Area Ditch
Jacintoport
9A
9B
9C
9D
9E
9F
9G
9H
9I
9J
9K
9L
9M
H064
H062
H074
H1190
H1301
H1315
H543
H607
H720
H545
68
175
176
178
180
182
183
644
645
134
146
225
410
501
774
778
788



Oil Spill Planning and Response Atlas Upper Coast of Texas 2013

The Texas General Land Office makes no representations or warranties regarding the accuracy or completeness of the information depicted on this map or the data from which it was produced. This map is not suitable for navigational purposes and does not purport to depict boundaries of private and public land.

0 0.5 1 Miles

0 0.5 1 Nautical Miles

0 2,500 5,000 Feet

0 1 2 Kilometers

Depth Soundings in Feet

PRIORITY PROTECTION AREAS

- HIGH
- MEDIUM
- LOW

HUMAN-USE FEATURES

- Boat Ramps
- Heliports
- Water Intake Point

ENVIRONMENTAL SENSITIVITY INDEX

- 10D Mangroves and Woody Vegetation
- 10C Freshwater Swamps
- 10B Freshwater Marshes
- 10A Salt and Brackish Water Marshes
- 9 Sheltered Tidal Flats
- 8C Sheltered Rocky/Karst Shores
- 8D Sheltered Scarps
- 8B Sheltered Riprap Structures
- 8A Sheltered Solid Manmade Structures
- 7 Exposed Tidal Flats
- 6B Exposed Riprap Structures
- 6A Gravel or Shell Beaches
- 5 Mixed Sand and Gravel or Shell Beaches
- 4 Coarse-Grained Sand Beaches
- 3B Scraps and Steep Slopes in Sand
- 3A Fine-Grained Sand Beaches
- 2B Wave-Cut Clay Platforms
- 2A Scraps and Steep Slopes in Clay
- 1 Exposed Walls and Other Solid Structures

- Geographic Response Plans
- Counties TCEQ
- City Limits
- Oyster Reef
- Oyster Shell on Mud
- Bird Rookery

LA PORTE

Map #27

HUMAN USE RESOURCES

Boat Ramps

RARNUM	NAME
H543	Tabb's Bay
H545	Sylvan Beach
H607	The Galley
H720	The Galley

Heliports

RARNUM	MANAGER	PHONE
H1190	C.J. Monk	(713) 476-3700
H1301	H. Carlos Smith	(713) 471-4226
H1315	Larry D. Tucker	(713) 476-1501

Water Intake Points

RARNUM	OWNER	TYPE
H062	Houston L&P-Sam Bertram	6
H064	Paktank Corporation-Deer Park	1
H074	Baywood Country Club	1

BIOLOGICAL RESOURCES

Birds

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	NESTING	LAYING	HATCHING	FLEDGING
176	Pied-billed grebe				X	X	X	X	X	X	X	X	X	X	X	X	MAR-AUG	MAR-AUG	MAR-AUG	APR-SEP
	American coot				X	X	X	X				X	X	X	X		-	-	-	-
177	Least tern	F	E				X	X	X	X	X	X	X				APR-SEP	APR-SEP	MAY-SEP	MAY-OCT
644	Least tern	F	E	18			X	X	X	X	X	X	X				APR-SEP	APR-SEP	MAY-SEP	MAY-OCT
645	Cattle egret			760	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	APR-JUL	APR-JUL	APR-AUG
	Snowy egret			170	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	APR-JUL	APR-JUL	MAY-AUG
	Black-crowned night heron			280	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-AUG	APR-AUG	APR-SEP
	White ibis			280	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	FEB-JUN	FEB-JUN	MAR-JUL
	Little blue heron			8	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	APR-JUL	APR-JUL	MAY-AUG
	Great blue heron			8	X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	FEB-JUN	FEB-JUN	MAR-JUL
	Tricolored heron			26	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-AUG	APR-AUG	MAY-SEP
	Roseate spoonbill			28	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-AUG	APR-AUG	MAY-SEP
	Olivaceous cormorant			77	X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	JAN-JUL	JAN-JUL	FEB-AUG
	Great egret			133	X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	MAR-JUL	MAR-JUL	MAR-AUG

Fish

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	LARVAL/JUV
178	Gulf menhaden				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	DEC-MAR
	Red drum				X	X	X	X	X	X	X	X	X	X	X	X	AUG-NOV	SEP-DEC
	Southern flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	OCT-DEC
180	Spot				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	NOV-FEB
182	Red drum				X	X	X	X	X	X	X	X	X	X	X	X	AUG-NOV	SEP-DEC
	Spotted seatrout				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC
183	Gulf menhaden			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	DEC-MAR
	Sand seatrout				X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-DEC
	Striped mullet				X	X	X	X	X	X	X	X	X	X	X	X	NOV-JAN	DEC-FEB

Shellfish

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	LARVAL/JUV.
68	Grass shrimp				X	X	X	X	X	X	X	X	X	X	X	X	-	-
	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
175	White shrimp				X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-OCT
	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
178	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
	White shrimp				X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-OCT
180	Grass shrimp				X	X	X	X	X	X	X	X	X	X	X	X	-	-
	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
183	American oyster (eastern)				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	APR-JUL
	Brackishwater clam				X	X	X	X	X	X	X	X	X	X	X	X	-	-
	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
	Brown shrimp				X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	FEB-JUN

Plants/Communities

RARNUM	NAME	S/F	T/E
774	Texas windmill-grass	F	C2
778	Houston machaeranthera	F	C2
788	Little bluestem-brownseed paspalum series		

LA PORTE — Map # 27

Polygon #	*Priority*	*Description: what organism(s), habitat(s)?*
Pinchpoint at mouth of Santa Anna Bayou can be boomed to protect polygon 1 (and polygons 8 and 9 on Highlands quad) from spills in San Jacinto River.		
1	Medium	**Marsh east of Santa Anna Bayou.** Nursery (high), bird habitat (medium). San Jacinto State Park. Continued on Highlands quad.
2	Low	**(a) Scott Bay, (b) Upper San Jacinto Bay, and (c) eastern Black Duck Bay.** Nursery (high).
3	High	**Northeastern Alexander Island.** Rookery (high). Best rookery in area (hundreds of nesting pairs). Note: Nesting season is February-August in rookeries.
4	Low	**South Crystal Bay.** Nursery (high). Continued on Highlands quad.

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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				☐
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7. Assignments

Boom entrance to Little Cedar Bayou.

Safety Note:

Responders should exercise caution due to uncharted pilings

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 A	La Porte	11327	27	Harris

13. Site Information

Located between Sylvan Beach and the Houston Yacht Club south of Hazel St.

14. Latitude 29-38-35 N

15. Longitude 095-00-51W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach Boat Ramp	0.5 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 south to Hwy 225 . Take Hwy 225 east until it ends at Hwy 146. Take Hwy 146 south to Fairmont Parkway. Turn left on Fairmont Parkway til it ends. Turn right on Bayshore Drive to the third driveway on the left - boat ramp entrance.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Medium Priority

Economic: Low Priority

24. Width of Inlet 350'

25. Water depth 1'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

Double boom may be required to protect Little Cedar Bayou.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom entrance to creek S of S Brownell Street.

Safety Note:

Responders should exercise caution due to uncharted pilings

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 B	La Porte	11327	27	Harris

13. Site Information

Located between S Brownell Street and Seabreeze Street

14. Latitude 29-39-34 N

15. Longitude 095-00-17W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach Boat Ramp	0.9 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 south to Hwy 225 . Take Hwy 225 east until it ends at Hwy 146. Take Hwy 146 south to Fairmont Parkway. Turn left on Fairmont Parkway til it ends. Turn right on Bayshore Drive to the third driveway on the left - boat ramp entrance.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Medium Priority

Economic: Low Priority

24. Width of Inlet 50'

25. Water depth 1'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

Double boom may be required to protect creek.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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					☐
					☐
					☐
					☐
					☐

7. Assignments

Boom entrance to creek east of S Blackwell Street

Safety Note:

Responders should exercise caution due to uncharted pilings

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 C	La Porte	11328	27	Harris

13. Site Information

Located between S Blackwell Street and Sandy Lane.

14. Latitude 29-39-46 N

15. Longitude 095-00-04W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach Boat Ramp	1.3 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 south to Hwy 225 . Take Hwy 225 east until it ends at Hwy 146. Take Hwy 146 south to Fairmont Parkway. Turn left on Fairmont Parkway til it ends. Turn right on Bayshore Drive to the third driveway on the left - boat ramp entrance.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Medium Priority

Economic: Low Priority

24. Width of Inlet 250'

25. Water depth 1'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

Double boom may be required to protect creek.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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				☐
				☐
				☐
				☐
				☐

7. Assignments

Boom to protect Barbours Cut fringe marsh.

Safety Note:

Responders should exercise caution due to frequent vessel movement.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 D	La Porte	11328	27	Harris

13. Site Information

Located on the north side of the turning basin.

14. Latitude 29-41-12 N

15. Longitude 095-00-29W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach Boat Ramp	4.2 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 south to Hwy 225 . Take Hwy 225 east until it ends at Hwy 146. Take Hwy 146 south to Fairmont Parkway. Turn left on Fairmont Parkway til it ends. Turn right on Bayshore Drive to the third driveway on the left - boat ramp entrance.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Low Priority

Economic: Low Priority

24. Width of Inlet N/A

25. Water depth 3'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect Black Duck Bay.

Safety Note:

Responders should exercise caution due to frequent vessel movement.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 E	La Porte	11328	27	Harris

13. Site Information

Located under the 146 Hwy at the entrance to Black Duck Bay.

14. Latitude 29-41-12 N

15. Longitude 095-00-29W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach Boat Ramp	4.9 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 south to Hwy 225 . Take Hwy 225 east until it ends at Hwy 146. Take Hwy 146 south to Fairmont Parkway. Turn left on Fairmont Parkway til it ends. Turn right on Bayshore Drive to the third driveway on the left - boat ramp entrance.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Medium Priority

Economic: Low Priority

24. Width of Inlet N/A

25. Water depth 2'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect Lower San Jacinto Bay.

Safety Note:

Responders should exercise caution due to frequent vessel movement.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 F	La Porte	11328	27	Harris

13. Site Information

Located west of the Fred Hartman Bridge.

14. Latitude 29-41-57 N

15. Longitude 095-01-28 W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach Boat Ramp	5.7 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 south to Hwy 225 . Take Hwy 225 east until it ends at Hwy 146. Take Hwy 146 south to Fairmont Parkway. Turn left on Fairmont Parkway til it ends. Turn right on Bayshore Drive to the third driveway on the left - boat ramp entrance.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: High Priority

Economic: Low Priority

24. Width of Inlet N/A

25. Water depth 2'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect fringe marsh SE of Brinson Point.

Safety Note:

Responders should exercise caution due to frequent vessel movement.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 G	La Porte	11328	27	Harris

13. Site Information

Located west of the Fred Hartman Bridge west of entrance to Lower San Jacinto Bay.

14. Latitude 29-41-56 N

15. Longitude 095-01-36 W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach Boat Ramp	5.7 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 south to Hwy 225 . Take Hwy 225 east until it ends at Hwy 146. Take Hwy 146 south to Fairmont Parkway. Turn left on Fairmont Parkway til it ends. Turn right on Bayshore Drive to the third driveway on the left - boat ramp entrance.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: High Priority

Economic: Low Priority

24. Width of Inlet N/A

25. Water depth 1'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect NE Alexander Island

Safety Note:

Responders should exercise caution due to frequent vessel movement/vessel wake and snakes.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 H	La Porte	11329	27	Harris

13. Site Information

Island is located west of Baytown and east of Upper San Jacinto Bay. **Area is high priority rookery area** - nesting season is from February-August.

14. Latitude N/A

15. Longitude N/A

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	6.1 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 north to IH-10 east - turn right on S Sheldon Rd - turn left onto Market St - Turn right to public boat ramp.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: High Priority

Environmental: High Priority

Economic: Low Priority

24. Width of Inlet N/A

25. Water depth 1'

26. Current < 1/2 knot

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Recommend diversion booming to divert product away from sensitive area.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect intake to Power Plant.

Safety Note:

Responders should exercise caution due to frequent vessel movement/vessel wake and submerged object.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 I	La Porte	11329	27	Harris

13. Site Information

Entrance is located southwest of Barnes Island in the northwest corner of Upper San Jacinto Bay.

14. Latitude 29-43-28 N

15. Longitude 095-03-13 W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	4.6 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 north to IH-10 east - turn right on S Sheldon Rd - turn left onto Market St - Turn right to public boat ramp.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Low Priority

Economic: High Priority

24. Width of Inlet 800'

25. Water depth 2'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect mouth of Santa Anna Bayou.

Safety Note: Responders should exercise caution due to frequent vessel movement/vessel wake and submerged object - shallow water.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 J	La Porte	11329	27	Harris

13. Site Information

Entrance is located on the southeast side of the San Jacinto Battleground State Park - Bird habitat.

14. Latitude 29-44-28 N

15. Longitude 095-04-01 W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	3.8 NM	Jon Boat

19. Directions From Sector Houston-Galveston

Take I-610 north to IH-10 east - turn right on S Sheldon Rd - turn left onto Market St - Turn right to public boat ramp.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium Priority

Environmental: High Priority

Economic: Low Priority

24. Width of Inlet 1000'

25. Water depth <1'

26. Current >1 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

Area has frequent shoreline changes booming may be difficult - recommend exclusion booming. Note: CCA has prepositioned 200' of 18' boom at position 29-44-27N 095-04-06W.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect mouth of Tucker Bayou..

Safety Note: Responders should exercise caution due to frequent vessel movement/vessel wake and submerged object.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 K	La Porte	11329	27	Harris

13. Site Information

Entrance is located on the south side of Buffalo Bayou west of San Jacinto Battleground State Park.

14. Latitude 29-44-30 N

15. Longitude 095-06-00 W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	3.8 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 north to IH-10 east - turn right on S Sheldon Rd - turn left onto Market St - Turn right to public boat ramp.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Low Priority

Economic: Low Priority

24. Width of Inlet 300'

25. Water depth 4'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	Assignment List ICS 204-OS

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom to protect mouth of cove east of Patrick Bayou.

Safety Note: Responders should exercise caution due to frequent vessel movement/vessel wake and submerged object.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9 L	La Porte	11329	27	Harris

13. Site Information

Entrance is located on the south side of Buffalo Bayou east of Patrick Bayou.

14. Latitude 29-44-19 N

15. Longitude 095-06-30 W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	3.6 NM	Work Boat

19. Directions From Sector Houston-Galveston

Take I-610 north to IH-10 east - turn right on S Sheldon Rd - turn left onto Market St - Turn right to public boat ramp.

20. Closest Airport La Porte Municipal Airport

21. Closest Helispot La Porte Municipal Airport

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low Priority

Environmental: Low Priority

Economic: Low Priority

24. Width of Inlet 60'

25. Water depth 1'

26. Current < 1/2 knot

27. # of Personnel 2-3

28. Booming Strategy Recomendation

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom to protect mouth of Patrick Bayou.

Safety Note: Responders should exercise caution due to frequent vessel movement/vessel wake and submerged object.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
9M	La Porte	11329	27	Harris

13. Site Information	14. Latitude	15. Longitude
Entrance is located on the south side of Buffalo Bayou south of Jacintoport.	29-44-17 N	095-06-40 W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
River Terrace Park	3.8 NM	Work Boat

19. Directions From Sector Houston-Galveston	20. Closest Airport	21. Closest Helispot
Take I-610 north to IH-10 east - turn right on S Sheldon Rd - turn left onto Market St - Turn right to public boat ramp.	La Porte Municipal Airport	La Porte Municipal Airport

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	25. Water depth	26. Current	27. # of Personnel
USCG	713-671-5100	Atlas Priority:	340'			
TGLO	281-470-6597	Low Priority		6'	< 1/2 knot	
TCEQ	512-463-7727	Environmental:				
RCC	713-869-5001	Low Priority				
TPWD	281-534-0130	Economic:				2-3
USFWS	281-286-8282	Low Priority				

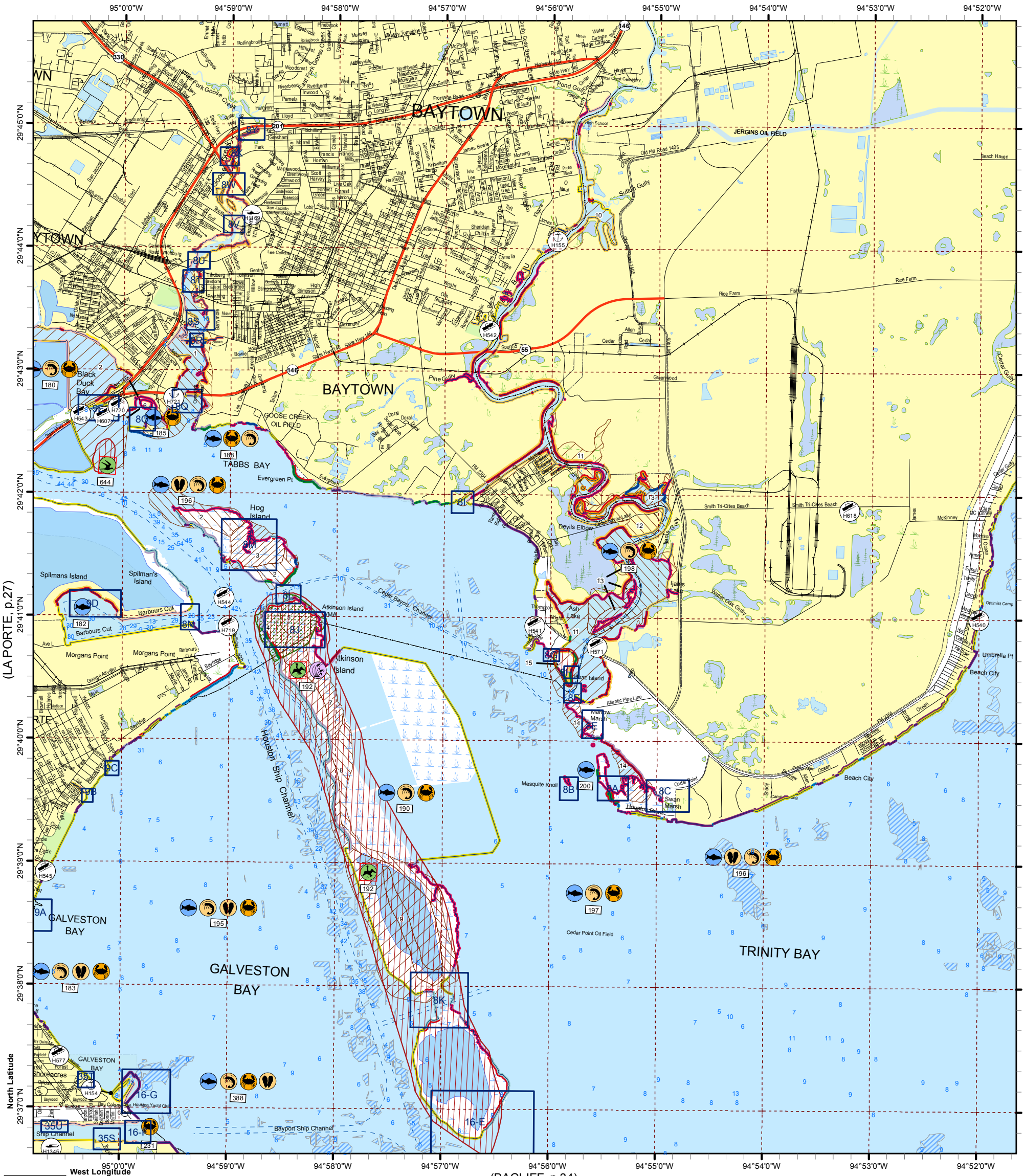
28. Booming Strategy Recomendation

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

MORGANS POINT

(MONT BELVIEU)

DATA



Oil Spill Planning and Response Atlas
Upper Coast of Texas
2013

The Texas General Land Office makes no representations or warranties regarding the accuracy or completeness of the information depicted on this map or the data from which it was produced. This map is not suitable for navigational purposes and does not purport to depict boundaries of private and public land.

Depth Soundings in Feet

PRIORITY PROTECTION AREAS
- HIGH
- MEDIUM
- LOW

HUMAN-USE FEATURES
- Boat Ramps
- Heliports
- Marina

ENVIRONMENTAL SENSITIVITY INDEX
- 10D Mangroves and Woody Vegetation
- 10C Freshwater Swamps
- 10B Freshwater Marshes
- 10A Salt and Brackish Water Marshes
- 9 Sheltered Tidal Flats
- 8C Sheltered Rocky/Karst Shores
- 8D Sheltered Scarps
- 8B Sheltered Riprap Structures
- 8A Sheltered Solid Manmade Structures
- 7 Exposed Tidal Flats
- 6B Exposed Riprap Structures
- 6A Gravel or Shell Beaches
- 5 Mixed Sand and Gravel or Shell Beaches
- 4 Coarse-Grained Sand Beaches
- 3B Scraps and Steep Slopes in Sand
- 3A Fine-Grained Sand Beaches
- 2B Wave-Cut Clay Platforms
- 2A Scraps and Steep Slopes in Clay
- 1 Exposed Walls and Other Solid Structures

- Geographic Response Plans
- Counties TCEQ
- City Limits
- Oyster Reef
- Oyster Shell on Mud
- Bird Rookery

MORGANS POINT

Map #26

HUMAN USE RESOURCES

Boat Ramps

RARNUM	NAME
H541	Thompson's
H542	Roseland Park
H571	Crawley's Bait Camp
H618	H221
H719	Mary's Bait Camp
H721	Bayland Park

Heliports

RARNUM	MANAGER	PHONE
H1169	Rod Seidel	(713) 420-8600

Marinas

RARNUM	NAME	ADDRESS	PHONE
H155	Baytown Marina	1512 1/2 Jones Baytown	(713) 427-1997

BIOLOGICAL RESOURCES

Birds

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	NESTING	LAYING	HATCHING	FLEDGING
192	American white pelican				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Olivaceous cormorant				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	JAN-JUL	JAN-JUL	FEB-AUG
	Brown pelican	F	E		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-AUG	APR-AUG	APR-SEP
194	Brown pelican	F	E		X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	APR-AUG	APR-AUG	APR-SEP
	American white pelican				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-

Fish

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	LARVAL/JUV
185	Sand seatrout				X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-DEC
	Spot				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	NOV-FEB
	Spotted seatrout				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC
	Red drum				X	X	X	X	X	X	X	X	X	X	X	X	AUG-NOV	SEP-DEC
188	Red drum				X	X	X	X	X	X	X	X	X	X	X	X	AUG-NOV	SEP-DEC
	Gulf menhaden				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	DEC-MAR
	Spotted seatrout				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC
	Sand seatrout				X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-DEC
190	Sand seatrout				X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-DEC
	Gulf menhaden				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	DEC-MAR
	Black drum				X	X	X	X	X	X	X	X	X	X	X	X	JAN-APR	JUL-MAR
	Red drum				X	X	X	X	X	X	X	X	X	X	X	X	AUG-NOV	SEP-DEC
	Striped mullet				X	X	X	X	X	X	X	X	X	X	X	X	NOV-JAN	DEC-FEB
	Atlantic croaker			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	APR-OCT
	Sheepshead				X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAR-AUG
195	Gulf menhaden				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	DEC-MAR
	Sand seatrout				X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-DEC
	Atlantic croaker				X	X	X	X	X	X	X	X	X	X	X	X	-	APR-OCT
	Striped mullet				X	X	X	X	X	X	X	X	X	X	X	X	NOV-JAN	DEC-FEB
196	Southern flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	OCT-DEC
	Atlantic croaker				X	X	X	X	X	X	X	X	X	X	X	X	-	APR-OCT
197	Atlantic croaker			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	APR-OCT
	Sand seatrout				X	X	X	X	X	X	X	X	X	X	X	X	-	MAR-DEC
	Sheepshead				X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAR-AUG
	Gulf menhaden				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	DEC-MAR
	Red drum				X	X	X	X	X	X	X	X	X	X	X	X	AUG-NOV	SEP-DEC
	Striped mullet				X	X	X	X	X	X	X	X	X	X	X	X	NOV-JAN	DEC-FEB
	Southern flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	OCT-DEC
	Spotted seatrout				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC
	Hardhead catfish				X	X	X	X	X	X	X	X	X	X	X	X	MAY-SEP	JUN-OCT
	Spot				X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	NOV-FEB
198	Sheepshead minnow				X	X	X	X	X	X	X	X	X	X	X	X	MAR-OCT	MAR-DEC
	Gulf menhaden			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	NOV-FEB	DEC-MAR
	Southern flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	OCT-DEC
	Striped mullet				X	X	X	X	X	X	X	X	X	X	X	X	NOV-JAN	DEC-FEB
	Black drum				X	X	X	X	X	X	X	X	X	X	X	X	JAN-APR	JUL-MAR
	Red drum				X	X	X	X	X	X	X	X	X	X	X	X	AUG-NOV	SEP-DEC
	Atlantic croaker				X	X	X	X	X	X	X	X	X	X	X	X	-	APR-OCT
	Gizzard shad				X	X	X	X	X	X	X	X	X	X	X	X	-	-
200	Gizzard shad				X	X	X	X	X	X	X	X	X	X	X	X	-	-

Shellfish

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	LARVAL/JUV.
185	Brown shrimp				X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	FEB-JUN
188	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
	Grass shrimp				X	X	X	X	X	X	X	X	X	X	X	X	-	-
	Brown shrimp				X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	FEB-JUN
190	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
	Brown shrimp				X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	FEB-JUN
	White shrimp				X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-OCT

MORGANS POINT CONTINUED

BIOLOGICAL RESOURCES CONT.

Shellfish Continued

RARNUM	NAME	S/F	T/E	CONCEN	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	LARVAL/JUV.
193	Brown shrimp				X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	FEB-JUN
195	Brackishwater clam				X	X	X	X	X	X	X	X	X	X	X	X	-	-
	Brown shrimp				X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	FEB-JUN
	White shrimp				X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-OCT
	American oyster (eastern)				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	APR-JUL
	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
196	American oyster (eastern)				X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	APR-JUL
	Brown shrimp				X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	FEB-JUN
	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
197	Blue crab			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG
	White shrimp			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-OCT
	Brown shrimp			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	FEB-JUN
198	White shrimp				X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	MAY-OCT
	Blue crab				X	X	X	X	X	X	X	X	X	X	X	X	APR-JUL	MAY-AUG

Plants/Communities

RARNUM	NAME	S/F	T/E
192	Smooth cordgrass		

MORGANS POINT Map # 26

Polygon #	*Priority*	*Description: what organism(s), habitat(s)?*
1	Medium	**Goose Lake - Upper Tabbs Bay.** Nursery (high), bird habitat (medium).
2	Medium	**(a) Northwestern and (b) southeastern Hog Island.** Bird habitat (high), nursery (high).
3	High	**Central Hog Island.** Wetlands (high), nursery (high), bird habitat (high).
4	High	**Northwestern Atkinson Island.** Bird habitat (high). Atkinson Island WMA.
5	High	**Northeastern Atkinson Island.** Wetlands (high), bird habitat (high), nursery (high). Atkinsons Island WMA.
6	Low	**Western Atkinson Island.** Bird habitat (high).
7	High	**Central eastern Atkinson Island.** Wetlands (high), bird habitat (high), nursery (high).
8	Medium	**Southeastern Atkinson Island.** Bird habitat (high), nursery (high).
9	Medium	**Central southern Atkinson Island.** Wetlands (high), bird habitat (high).
10	Low	**Basin at Sutton Gully and Cedar Bayou.** Nursery (high).
Pinchpoints at (1) mouth of Cedar Bayou Diversion Canal, (2) mouth of Ash Lake, and (3) mouth of Cedar Bayou can be boomed to protect polygons 11, 12, and 13 from spills in Galveston Bay.		
11	Low	**(1) Ash Lake and mouth of Cedar Bayou, (2) Cedar Bayou north of Devils Elbow and Cedar Bayou Diversionary Canal.** Nursery (high).
12	Medium	**Lower Cedar Bayou: Ijams Lake, Negrohead Lake, Devils Elbow.** Nursery (high), bird habitat (high).
13	High	**Cedar Bayou meanders (a - e).** Wetlands (high), nursery (high), bird habitat (high).
14	High	**(a) Marrow Marsh and (b) Swan Marsh.** Wetlands (high), nursery (high), bird habitat (high).
15	Low	**Boaz Island.** Nursery (high), rookery (low).
16	Low	**(a) Northeastern and (b) southeastern Black Duck Bay.** Nursery (high). Continued on La Porte quad.

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
				☐
				☐
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				☐
				☐

7. Assignments

Boom cut between Atkinson Island near marker 82.

Safety Note:

Crews operating along the Ship Channel should expect wake action as vessels pass.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26A	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Atkinson Island north of marker 82.

14. Latitude 29-38-43N

15. Longitude 94-52-48W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach	3.3NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston

Take I-610 south to 225 East. Follow 225 East to South 146. Follow 146 South to Fairmont Parkway. Take Fairmont Parkway East to dead end, then turn right. Sylvan Beach boat ramp is immediately on the left.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority:

Low

Environmental:

Habitat for Fish

Economic:

Along the Houston Ship Channel

24. Width of Inlet 1800'

25. Water depth

26. Current Medium

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom to protect sensitive marshes.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom to protect Swan Marsh West of Houston Point.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26B	Morgans Point	11326, 11327, 11338	26	Chambers

13. Site Information	14. Latitude	15. Longitude
Swan Marsh West of Houston Point	29-39-53N	94-55-13W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Crawley's Bait Camp	1.66 NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston	20. Closest Airport	21. Closest Helispot
North on I-610, exit East on I-10 then south on FM 1405 to dead end then right.	Ellington Field Airport EFD	Ellington Field Airport EFD

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	25. Water depth	26. Current	27. # of Personnel
USCG	713-671-5100	Atlas Priority:	N/A			
TGLO	281-470-6597	High		N/A	Slow	2-4
TCEQ	512-463-7727	Environmental:				
RCC	713-869-5001	N/A				
TPWD	281-534-0130	Economic:				
USFWS	281-286-8282	N/A				

28. Booming Strategy Recomendation

Boom to protect sensitive marshes.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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				☐
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7. Assignments

Boom to protect Houston Point (Cedar Point) marsh area.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26C	Morgans Point	11326, 11327, 11338	26	Chambers

13. Site Information

Houston Point marsh area.

14. Latitude 29-39-22N

15. Longitude 94-55-25W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Crawley's Bait Camp	1.66 NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston

North on I-610, exit East on I-10 then south on FM 1405 to dead end then right.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: High

Environmental: Fish Habitat

Economic: N/A

24. Width of Inlet N/A

25. Water depth N/A

26. Current Medium

27. # of Personnel 2-6

28. Booming Strategy Recomendation

Boom to protect sensitive marshes.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom to protect Mosquite Knoll Island.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26D	Morgans Point	11326, 11327, 11338	26	Chambers

13. Site Information	14. Latitude	15. Longitude
Mosquite Knoll Island.	29-39-22N	94-55-25W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Crawley's Bait Camp	1.66 NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston	20. Closest Airport	21. Closest Helispot
North on I-610, exit East on I-10 then south on FM 1405 to dead end then right.	Ellington Field Airport EFD	Ellington Field Airport EFD

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	25. Water depth	26. Current	27. # of Personnel
USCG	713-671-5100	Atlas Priority:	N/A	N/A	Medium	2-6
TGLO	281-470-6597	High				
TCEQ	512-463-7727	Environmental:				
RCC	713-869-5001	Fish Habitat				
TPWD	281-534-0130	Economic:				
USFWS	281-286-8282	N/A				

28. Booming Strategy Recomendation

Boom to protect sensitive marshes.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect Marrow Marsh east of Cedar Bayou entrance.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26E	Morgans Point	11326, 11327, 11338	26	Chambers

13. Site Information	14. Latitude	15. Longitude
Marrow Marsh	29-40-19N	94-55-53W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Crawley's Bait Camp	0.5 NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston	20. Closest Airport	21. Closest Helispot
North on I-610, exit East on I-10 then south on FM 1405 to dead end then right.	Ellington Field Airport EFD	Ellington Field Airport EFD

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	25. Water depth	26. Current	27. # of Personnel
USCG	713-671-5100	Atlas Priority:	N/A			
TGLO	281-470-6597	High		N/A	Medium	2-6
TCEQ	512-463-7727	Environmental:				
RCC	713-869-5001	Fish Habitat				
TPWD	281-534-0130	Economic:				
USFWS	281-286-8282	N/A				

28. Booming Strategy Recomendation

Boom to protect sensitive marshes.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom entrance to Cedar Bayou.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26F	Morgans Point	11326, 11327, 11338	26	Chambers

13. Site Information	14. Latitude	15. Longitude
Entrance to Cedar Bayou East of Boaz Island.	29-40-26N	94-55-50W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Crawley's Bait Camp	0.5 NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston	20. Closest Airport	21. Closest Helispot
North on I-610, exit East on I-10 then south on FM 1405 to dead end then right.	Ellington Field Airport EFD	Ellington Field Airport EFD

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	25. Water depth	26. Current	27. # of Personnel
USCG	713-671-5100	Atlas Priority:	750'			
TGLO	281-470-6597	Low		16'	slow	
TCEQ	512-463-7727	Environmental:				
RCC	713-869-5001	Nursery and Rookery				4-6
TPWD	281-534-0130	Economic:				
USFWS	281-286-8282	N/A				

28. Booming Strategy Recomendation

Boom to protect Boaz Island.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect Boaz Island.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26G	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information	14. Latitude	15. Longitude
Boaz Island	29-40-39N	94-56-01W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Crawley's Bait Camp	0.5 NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston	20. Closest Airport	21. Closest Helispot
North on I-610, exit East on I-10 then south on FM 1405 to dead end then right.	Ellington Field Airport EFD	Ellington Field Airport EFD

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	25. Water depth	26. Current	27. # of Personnel
USCG	713-671-5100	Atlas Priority:	N/A	2'	slow	4-6
TGLO	281-470-6597	Low				
TCEQ	512-463-7727	Environmental:				
RCC	713-869-5001	Nursery and Rookery				
TPWD	281-534-0130	Economic:				
USFWS	281-286-8282	N/A				

28. Booming Strategy Recomendation

Boom to protect Boaz Island.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom entrance to Cedar Bayou west of Boaz Island.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26H	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Entrance to Cedar Bayou west of Boaz Island.

14. Latitude 29-40-39N

15. Longitude 94-56-00W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Crawley's Bait Camp	0.5 NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston

North on I-610, exit East on I-10 then south on FM 1405 to dead end then right.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority:

Low

Environmental:

Nursery

Economic:

N/A

24. Width of Inlet 100'

25. Water depth 6'

26. Current slow

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom to protect Boaz Island.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
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7. Assignments

Boom to protect Atkinson Island and Wildlife Management Area.

Safety Note:
Crews operating along the Ship Channel should expect wake action as vessels pass.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26I	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Wildlife Management Area of Atkinson island.

14. Latitude
29-41-14N

15. Longitude
94-58-29W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach	3.0 NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston
Take I-610 south to 225 East. Follow 225 East to South 146. Follow 146 South to Fairmont Parkway. Take Fairmont Parkway East to dead end, then turn right. Sylvan Beach boat ramp is immediately on the left.

20. Closest Airport
Ellington Field Airport EFD

21. Closest Helispot
Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk
Atlas Priority:
High
Environmental:
Habitat fo diving birds, upland/wetland veg.
Economic:
along the Houston Ship Channel

24. Width of Inlet
N/A

25. Water depth
N/A

26. Current Medium

27. # of Personnel
4-6

28. Booming Strategy Recomendation
Boom to protect sensitive marsh. Dredge spoil area on east side of island contains cuts that should be boomed to prevent migration into the marshes.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
				☐
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				☐
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7. Assignments

Boom Eentrance to Barbours Cut

Safety Note:

Crews operating along the Ship Channel should expect wake action as vessels pass. Located in Security Zone.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26J	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Barbours Cut entrance.

14. Latitude 29-41-02N

15. Longitude 94-59-16W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach	3.0 NM	Small Shallow hull (<2' draft)

19. Directions From MSO Houston-Galveston

Take I-610 south to 225 East. Follow 225 East to South 146. Follow 146 South to Barbours Cut Blvd. Left on Barbours Cut Blvd to terminal.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet
USCG	713-671-5100	Atlas Priority:	850'
TGLO	281-470-6597	N/A	**25. Water depth**
TCEQ	512-463-7727	Environmental:	20'
RCC	713-869-5001	N/A	**26. Current** N/A
TPWD	281-534-0130	Economic:	**27. # of Personnel**
USFWS	281-286-8282	Along the Houston Ship Channel	4-6

28. Booming Strategy Recomendation

Boom to prevent migration.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom cut between Hog and Atkinson Islands.

Safety Note:

Crews operating along the Ship Channel should expect wake action as vessels pass.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26K	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Cut between Hog and Atkinson Islands.

14. Latitude 29-41-12N

15. Longitude 94-58-30W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach	3.0 NM	any

19. Directions From MSO Houston-Galveston

Take I-610 south to 225 East. Follow 225 East to South 146. Follow 146 South to Fairmont Parkway. Take Fairmont Parkway East to dead end, then turn right. Sylvan Beach boat ramp is immediately on the left.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: High

Environmental: Habitat for diving birds.

Economic: Along the Houston Ship Channel

24. Width of Inlet 1150'

25. Water depth 14'

26. Current Medium

27. # of Personnel 4-8

28. Booming Strategy Recomendation

Boom cut between Hog and Atkinson Islands.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom to protect Hog Island.

Safety Note:

Crews operating along the Ship Channel should expect wake action as vessels pass.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26L	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information	14. Latitude	15. Longitude
South end of Hog Island.	29-41-17N	94-58-26W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Sylvan Beach	3.0 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston	20. Closest Airport	21. Closest Helispot
Take I-610 south to 225 East. Follow 225 East to South 146. Follow 146 South to Fairmont Parkway. Take Fairmont Parkway East to dead end, then turn right. Sylvan Beach boat ramp is immediately on the left.	Ellington Field Airport EFD	Ellington Field Airport EFD

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	25. Water depth	26. Current	27. # of Personnel
USCG	713-671-5100	Atlas Priority:	N/A			
TGLO	281-470-6597	High		N/A	Medium	4-6
TCEQ	512-463-7727	Environmental:				
RCC	713-869-5001	N/A				
TPWD	281-534-0130	Economic:				
USFWS	281-286-8282	Along the Houston Ship Channel				

28. Booming Strategy Recomendation

Boom to protect sensitive marshes.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom to protect intake canal west of Bay Oak Harbor Road.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26M	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Cooling system intake canal west of Bay Oak Harbor Road.

14. Latitude 29-41-56N

15. Longitude 94-56-52W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
Roseland Park	2.46 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston

I-10 East to Spur 330 South to West Texas Avenue. West Texas Avenue past Business 146 and Tri-City Beach Road to Roseland Drive. Right on Roseland Drive to ramp.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Low

Environmental: Nursery Area

Economic: N/A

24. Width of Inlet 250'

25. Water depth 8'

26. Current Slow

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom to protect Cedar Bayou west of Harbor View Road.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom entrance to Bayland Park Marina.

Safety Note:

Crews operating along the Ship Channel should expect wake action as vessels pass.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26N	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information	14. Latitude	15. Longitude
Bayland Park Marina	29-42-31N	95-00-00W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
V.H. "Buddy" McBride	0.84 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston	20. Closest Airport	21. Closest Helispot
I-10 East to Spur 330 South. Spur 330 South to Highway 146 South. Highway 146 South to Business 146. Right at first light on Business 146.	Ellington Field Airport EFD	Ellington Field Airport EFD

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	
USCG	713-671-5100	Atlas Priority:	800'	
TGLO	281-470-6597	N/A	25. Water depth	
TCEQ	512-463-7727	Environmental:	5'	
RCC	713-869-5001	N/A	26. Current	N/A
TPWD	281-534-0130	Economic:	27. # of Personnel	
USFWS	281-286-8282	N/A	4-6	

28. Booming Strategy Recomendation

Boom to protect sensitive marshes.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom entrance to Goose Creek at Business 146.

Safety Note:

Crews operating along the shoreline of the Houston Ship Channel should expect wake action as vessels pass.

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26O	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information	14. Latitude	15. Longitude
Business 146 at Goose Creek	29-42-50N	94-59-30W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
V.H. "Buddy" McBride	0.1 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston	20. Closest Airport	21. Closest Helispot
I-10 East to Spur 330 South. Spur 330 South to Highway 146 South. Highway 146 South to Business 146. Right at first light.	Ellington Field Airport EFD	Ellington Field Airport EFD

22. Trustee/Contact Numbers		23. Resources at Risk	24. Width of Inlet	
USCG	713-671-5100	Atlas Priority:	500'	
TGLO	281-470-6597	Medium	25. Water depth	
TCEQ	512-463-7727	Environmental:	8'	
RCC	713-869-5001	Habitat for fish, shrimp, crabs	26. Current	Slow
TPWD	281-534-0130	Economic:	27. # of Personnel	
USFWS	281-286-8282	N/A	4-6	

28. Booming Strategy Recomendation

Boom entrance to Goose Creek at Business 146.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom across Goose Creek at first railroad bridge north of Main Street.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26Q	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Goose Creek at Main Street, Baytown, Tx.

14. Latitude 29- - N

15. Longitude 94- - W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
V.H. "Buddy" McBride	0.85 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston

I-10 East to Spur 330 South. Spur 330 South to Highway 146 South. Highway 146 South to Business 146. Right at first light.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium

Environmental: N/A

Economic: N/A

24. Width of Inlet 600'

25. Water depth

26. Current

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom across Goose Creek at first railraod bridge north of Main Street.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom across Goose Creek at Railroad Bridge south of Market Street.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26R	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Goose Creek at Railroad Bridge south of Market Street, Baytown, Tx.

14. Latitude 29-43-50N

15. Longitude 94-59-24W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
V.H. "Buddy" McBride	1.02 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston

I-10 East to Spur 330 South. Spur 330 South to Highway 146 South. Highway 146 South to Business 146. Right at first light.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium

Environmental: N/A

Economic: N/A

24. Width of Inlet 500'

25. Water depth 8'

26. Current

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom across Goose Creek at railroad bridge south of Market Street.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom across Goose Creek at Market Street.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26S	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Goose Creek at Market Street, Baytown, Tx.

14. Latitude 29-43-55N

15. Longitude 94-59-20W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
V.H. "Buddy" McBride	1.1 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston

I-10 East to Spur 330 South. Spur 330 South to 146 South. Exit Lynchburg Road off 146 South. Left on Lynchburg Road and Left on Market Street to bridge.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium

Environmental: N/A

Economic: N/A

24. Width of Inlet 150'

25. Water depth 10'

26. Current Slow

27. # of Personnel 2-6

28. Booming Strategy Recomendation

Boom across Goose Creek at Market Street.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom across Goose Creek at West Texas Avenue, Baytown, Tx.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26T	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Goose Creek at West Texas Avenue.

14. Latitude 29-44-13N

15. Longitude 94-59-00W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
V.H. "Buddy" McBride	1.6 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston

I-10 East to Spur 330 South. Spur 330 South to 146 South. Exit Texas Avenue and go left to bridge over creek.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium

Environmental: N/A

Economic: N/A

24. Width of Inlet 150'

25. Water depth 7'

26. Current Slow

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom across Goose Creek at West Texas Avenue.

29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom across Goose Creek at Hwy 330.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26U	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Goose Creek at Hwy 330, Baytown, Tx.

14. Latitude 29-44-33N

15. Longitude 94-59-02W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
V.H. "Buddy" McBride	1.97 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston

I-10 East to Spur 330 South. Spur 330 past Highway 146 to bridge over creek.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium

Environmental: N/A

Economic: N/A

24. Width of Inlet 110'

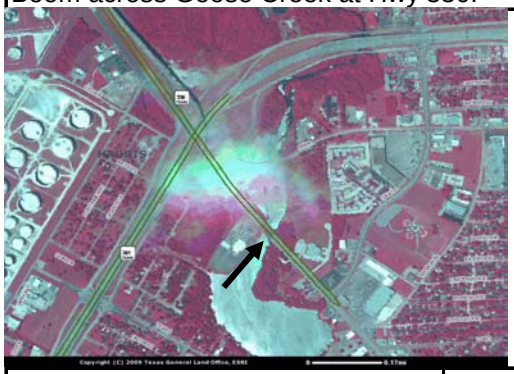
25. Water depth 6'

26. Current Slow

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom across Goose Creek at Hwy 330.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks	
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7. Assignments

Boom across Goose Creek at Park Street.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26V	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Goose Creek at Park Street, Baytown, Tx.

14. Latitude 29-44-32N

15. Longitude 94-58-58W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
V.H. "Buddy" McBride	2.1 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston

I-10 East to Spur 330 South. Spur 330 South to Spur 201. Left on Spur 201 and immediate rigth onto Park Street. Continue to bridge over creek.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium

Environmental: N/A

Economic: N/A

24. Width of Inlet 200'

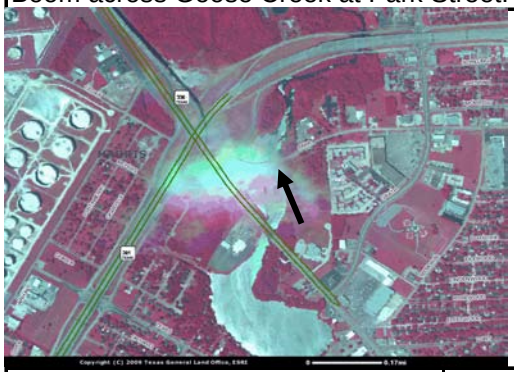
25. Water depth 6'

26. Current Slow

27. # of Personnel 4-6

28. Booming Strategy Recomendation

Boom across Goose Creek at Park Street.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

1. Incident Name	2. Operational Period (Date/Time)	**Assignment List ICS 204-OS**

3. Branch	4. Division/Group

5. Operations Personnel

	Name	Affiliation	Contact #(s)
Operations Section Chief			
Branch Director			
Division/Group Supervisor			

6. Resources Assigned This Period "X" indicates 204a attachment with special instructions

Resource Identifier	Leader	Contact Info #	# or Persons	Reporting info/Notes/Remarks
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7. Assignments

Boom across Goose Creek at Hwy 146, Baytown, Tx.

Safety Note:

8. Site #	9. Quad Name	10. NOAA Chart #	11. TGLO Atlas Page #	12. County
26W	Morgans Point	11326, 11327, 11338	26	Harris

13. Site Information

Goose Creek at Hwy 146.

14. Latitude 29-45-05N

15. Longitude 94-58-45W

16. Closest Boat Ramp	17. Distance From Ramp	18. Boat Type
V.H. "Buddy" McBride	2.45 NM	small vessel (<2'draft)

19. Directions From MSO Houston-Galveston

I-10 East to Spur 330. Spur 330 South to Highway 146 East. Continue to bridge over creek.

20. Closest Airport Ellington Field Airport EFD

21. Closest Helispot Ellington Field Airport EFD

22. Trustee/Contact Numbers

USCG	713-671-5100
TGLO	281-470-6597
TCEQ	512-463-7727
RCC	713-869-5001
TPWD	281-534-0130
USFWS	281-286-8282

23. Resources at Risk

Atlas Priority: Medium

Environmental: N/A

Economic: N/A

24. Width of Inlet 60'

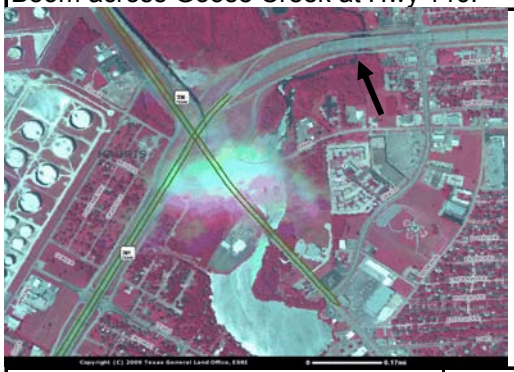
25. Water depth 4'

26. Current Slow

27. # of Personnel 2-4

28. Booming Strategy Recomendation

Boom across Goose Creek at Hwy 146.



29. Prepared By:	30.Reveiwed by (PSC):	31. Reveiwed by (OSC):

8. MORGANS POINT

W Trinity Bay, NW Galveston Bay, HSC, Tabbs Bay, Goose Cree and Cedar Bayou

CHART(S): Nautical Chart (11326, 11327 and 11338)
Upper Coast Atlas page 26

STAGING AREA:

1. Crawley's Bait Camp (2)	29-40-44 N 094-55-34 W
2. Thompson's Fishing Camp (1)	29-40-51 N 094-56-14 W
3. V.H. “Buddy” McBride boat ramp (3)	29-42-45 N 094-59-35 W
4. Morgan's point boat ramp (1)	29-40-55 N 094-59-01 W
5. Roseland Park (2)	29-43-22 N 094-56-33 W

ACCESS ROAD:

1. Crawley’s Marina (Old location): East on Hwy 225 from Houston to Hwy 146. Turn left on Hwy 146 and proceed north to Hwy 55. Turn right onto Hwy 55 and proceed east on Hwy 55 to FM 1405. Turn right on FM 1405 and proceed south to FM 2354. Turn right on FM 2354 and proceed boat ramp.

2. East on Hwy 225 from Houston to Hwy 146. Turn left on Hwy 146 and proceed north to Hwy 55. Turn right onto Hwy 55 and proceed east on Hwy 55 to Tri-City Beach Rd. Turn right and proceed to boat ramp.

3. East on Hwy 225 from Houston to Hwy 146. Turn left of Hwy 146 and proceed north to boat ramp located at first right after crossing Fred Hartman Bridge.

4. Hwy 146 south to Barbour’s Cut Blvd. Turn left proceeds to Vinsonia Ave. Turn right proceed to Ballister Rd. Turn left to boat ramp at end of road.

5. Hwy 146 north to spur 99. Turn right proceed to Tri-City. Turn left on proceed to E Texas. Turn right proceed to Roseland. Turn right on Roseland proceed to boat ramp on left at Roseland Park.

DESCRIPTION:

<u>Trinity Bay</u>

8-A Boom to protect Houston Point (Cedar Point) marsh area
8-B Boom to protect Mesquite Knoll Island.
8-C Boom to protect Swan Marsh west of Houston Point

<u>Cedar Bayou</u>

8-D Boom Bayou close to spill site area.
8-E Boom to protect Marrow Marsh east of Cedar Bayou entrance
8-F Boom entrance to Cedar Bayou (550' wide)
8-G Boom entrance to Cedar Bayou west of Boaz Island (150'wide)
8-H Boom to protect Boaz Island
8-I Boom to protect Intake Canal West of Bay Oak Harbor Road. (500' wide)

<u>Galveston Bay</u>

8-J Boom to protect Atkinson Island &(WMA)

8-K Boom cut between Atkinson Island near marker"82" (1,800' wide)

Houston Ship Channel

8-L Boom cut between Hog and Atkinson Island (1,150' wide)
8-M Boom to protect Hog Island
8-N Boom entrance to Barbours Cut (800' wide)
8-O Boom entrances to Bayland Park Marina (850' wide)

Goose Creek

8-P Boom Bayou close to spill site area.
8-Q Boom entrance to Goose Creek at Hwy 146 (516' wide)
8-R Boom across Goose Creek at Main Street (546' wide)
8-S Boom across Goose Creek at 1st.R/R Bridge north of Main (595' wide)
8-T Boom across Goose Creek at R/R Bridge south of Market (486' wide)
8-U Boom across Goose Creek at Market Street (192' wide)
8-V Boom across Goose Creek at W. Texas Ave. (153' wide)
8-W Boom across Goose Creek at Hwy 330 (145' wide)
8-X Boom across Goose Creek at Park Street (210' wide)
8-Y Boom across Goose Creek at Hwy 146 (60' wide)

NOTIFY:

U.S.C.G. via NRC	(800) 424-8802
Texas General Land Office (TGLO)	(800) 832-8224
Texas Parks & Wildlife Dept. (TP&WD)	(281) 461-4071 Houston
U.S. Fish & Wildlife Service	(281) 286-8282 Houston

CAUTION:
Very shallow water near the shoreline of Trinity Bay, Atkinson and Hog Island's east shores. Crews operating along the shoreline of the ship channel should expect wake action as vessels pass.

NATURAL COLLECTION AREA:
The southeast corner of Morgan's Point tends to be impacted during spill events. Also, product accumulates around the cuts of Atkinson Island.

Site Specific Information

Site # 8-X TGLO Polygon # 1 Quad Name Morgan's Point

Site information:

Site Description: Goose Creek @ Park Street

Latitude: **N** 29°44'32" **Longitude:** **W** 94°58'58" **Map# 26**
NOAA chart # 11326, 11327, 11338 **County:** Harris
Nearest ICW Marker: N/A **Date last visited:** February 17, 2004

Access:

Closest Boat Ramp:	V.H. "Buddy" McBride boat ramp
Distance:	20 minutes
Boat type recommended:	Any
Closest Airport:	William P Hobby Airport HOU
Closest Helicopter Landing:	William P Hobby Airport, 29°38'43.50"N 095°16'44.00"W

From MSO Houston-Galveston:

North on Hwy 610, exit east onto I-10, exit onto Market Street.

Trustees/ Contact Numbers:	U.S.C.G. via NRC	(800) 424-8802
	TGLO via Hotline	(800) 832-8224
	TCEQ	(512) 463-7727

Resources at Risk:

Atlas Priority:	Medium
Environmental:	N/A
Economic:	N/A

Booming strategy recommendations:

Recommendations:	Boom across Goose Creek at Park Street.		
Number of personnel:	4-6	**Width of inlet:**	200 ft
Current:	Slow	**Water depth at mouth:**	6 ft

Safety / Cautionary notes: _____

8. MORGANS POINT

W Trinity Bay, NW Galveston Bay, HSC, Tabbs Bay, Goose Cree and Cedar Bayou

CHART(S): Nautical Chart (11326, 11327 and 11338)
Upper Coast Atlas page 26

STAGING AREA:

1. Crawley's Bait Camp (2)	29-40-44 N 094-55-34 W
2. Thompson's Fishing Camp (1)	29-40-51 N 094-56-14 W
3. V.H. “Buddy” McBride boat ramp (3)	29-42-45 N 094-59-35 W
4. Morgan's point boat ramp (1)	29-40-55 N 094-59-01 W
5. Roseland Park (2)	29-43-22 N 094-56-33 W

ACCESS ROAD:

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NOTIFY:

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U.S. Fish & Wildlife Service	(281) 286-8282 Houston

CAUTION:
Very shallow water near the shoreline of Trinity Bay, Atkinson and Hog Island's east shores. Crews operating along the shoreline of the ship channel should expect wake action as vessels pass.

NATURAL COLLECTION AREA:
The southeast corner of Morgan's Point tends to be impacted during spill events. Also, product accumulates around the cuts of Atkinson Island.

Site Specific Information

Site # 8-Y TGLO Polygon # 16 Quad Name Morgan's Point

Site information:

Site Description: Goose Creek @ Hwy 146

Latitude:	**N** 29°45'05"	**Longitude:**	**W** 94°58'45" **Map# 26**
NOAA chart #	11326, 11327, 11338	**County:**	Harris
Nearest ICW Marker:	N/A	**Date last visited:**	February 17, 2004

Access:

Closest Boat Ramp:	V.H. "Buddy" McBride boat ramp
Distance:	25 minutes
Boat type recommended:	Small boat with draft of less than 2 feet.
Closest Airport:	Ellington Field Airport EFD
Closest Helicopter Landing:	Ellington Field Airport, 29°36'26.40"N 095°09'31.50"W

From MSO Houston-Galveston:

North on Hwy 610, exit east onto I-10, exit onto Market Street.

Trustees/ Contact Numbers:	U.S.C.G. via NRC	(800) 424-8802
	TGLO via Hotline	(800) 832-8224
	TCEQ	(512) 463-7727

Resources at Risk:

Atlas Priority:	Low
Environmental:	Habitat for fish, shrimp
Economic:	Along Houston Ship Channel.

Booming strategy recommendations:

Recommendations:	Boom across Goose Creek at Hwy 146.		
Number of personnel:	2-4	**Width of inlet:**	60 ft
Current:	Slow	**Water depth at mouth:**	4 ft

Safety / Cautionary notes: _____